INJURY EXPERIENCE IN THE METAL AND NONMETAL INDUSTRIES, 1955

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* * * * * * * * **Information Circular 7915**

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1959

UNITED STATES DEPARTMENT OF THE INTERIOR
Fred A. Seaton, Secretary

BUREAU OF MINES
Marling J. Ankeny, Director

The Library of Congress has cataloged this publication as follows:

U.S. *Bureau of Mines.*
Injury experience in the metal and nonmetal industries. 1911–
[Washington]
no. in v. tables. 24–27 cm.
Issued 1911–22 as the Bureau's Technical paper (TN1.U6) ; 1923–42 as its Bulletin (TN23.U4) ; 1954– as its Information circular.
Publication suspended 1943–53; issue for 1954 includes unpublished statistics for 1954.
Title varies: 1911–38, Metal-mine accidents in the United States.—1939–42, Metal- and nonmetal-mine accidents in the United States.
1. Mine accidents. (Series: U.S. Bureau of Mines. Technical paper. Series: U.S. Bureau of Mines. Bulletin. Series: U.S. Bureau of Mines. Information circular)
TN295.U4 622.8 13–35245 rev*
——— 2d set. TN311.U48
Library of Congress

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington 25, D.C. - Price 30 cents

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INJURY EXPERIENCE IN THE METAL AND NONMETAL INDUSTRIES, 1955[1]

By

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Introduction and Summary

THIS INFORMATION CIRCULAR covers the calendar year 1955 and contains statistical data on employment and injuries pertinent to metal and nonmetal mining and to their mills and processing plants that are voluntarily reported annually to the Federal Bureau of Mines. This report, unlike previous publications, lists not only production and development workers but also office employees associated with mining and milling or processing. The last publication in the series, Information Circular 7798, Injury Experience in the Metal and Nonmetal Industries, 1954, also contains unpublished injury and employment statistics for 1943 through 1953.

The Bureau is authorized to request data on injuries and employment from operators in the metal- and nonmetal-mining industries. The information voluntarily submitted by these operators contributes immeasurably to the promotion of safety in the mineral mining industries, as it discloses the hazards to which metal and nonmetal workers are continually exposed during mineral extractive operations.

The data presented in this publication are classified according to the principal minerals produced and include information on copper, gold-silver-lode, gold placer, iron, lead-zinc, miscellaneous metals, abrasives, asbestos, asphalt, barite, clay, feldspar-mica-quartz, fluorspar, gypsum, magnesite, phosphate rock, potash, salt, sulfur, talc-soapstone, and minor nonmetal mines.

From 1911 to 1914, inclusive, the Bureau classified nonfatal injuries into two groups—"serious" injuries, those that disabled an employee for more than 20 days; and "slight" injuries, those that disabled an employee for longer than the remainder of the day of injury but less than 20 days. From 1915 to 1929, inclusive, "serious" injuries reported to the Bureau were only those that resulted in some permanent disability, and temporary total injuries were those that disabled an employee for more than 14 days.

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Beginning in 1930, all temporary total injuries have been shown separately. This classification includes all temporary total injuries that disabled an employee for more than the remainder of the day when the injury occurred but did not result in any permanent impairment.

All nonfatal injuries in this publication are classified by the extent of disability, as follows: Permanent total, permanent partial, and temporary total injuries. Injury-frequency rates in this publication are calculated on the basis of the number of disabling injuries per million man-hours worked.

Injury and employment data at metal and nonmetal mines in the United States and Alaska for 1955 are presented in this circular under the following general sections:

(*A*) *General injury experience:*

Tables 1–4: Contain current data on the number of injuries, injury-frequency rates, related employment data, agency, location, and degree of injury.

(*B*) *Injury experience at different kinds of mines, including metallurgical plants:*

Tables 5–9: Contain current data on number of injuries, injury-frequency rates, and related employment, by location, agency, and degree of injury in the metal and nonmetal industry including metallurgical plants.

(*C*) *Injury experience, by States and Alaska:*

Tables 10–19: Contain current data on the number of injuries, injury-frequency rates, and related employment, by location, agency, and degree of injury.

(*D*) *Selected injury data:*

Tables 20–28: Contain current data and injury experience at miscellaneous metal and nonmetal mines, by commodity. Tables 20 to 28 also include injury experience at clay, placer, and metal and nonmetal mines by mining method.

(*E*) *Historical injury experience:*

Table 29: Contains employment and injury data on metal and nonmetal mines, 1911–55.

ACKNOWLEDGMENTS

The Bureau of Mines gratefully acknowledges the cooperation of the metal- and nonmetal-mine operators who voluntarily furnished data on injuries and related employment; their contributions have greatly promoted safety in the mineral industries in the United States and Alaska.

GENERAL INJURY EXPERIENCE

(Tables 1–4)

Reports from operating companies for 1955 showed an increase of 227 men employed over the reports for the preceding year. Fatalities increased 3 percent and nonfatalities increased 18 percent during 1955. The combined (fatal and nonfatal) injury-frequency rate increased 12 percent—from 37.77 in 1954 to 42.20 in 1955.

During 1955, 2,653 active operations reported 79,647 men employed and an average of 263 days of activity per man.

There were 98 fatal and 6,993 nonfatal injuries, which included 11 permanent total, 333 permanent partial, and 6,640 temporary-total disabilities reported during 1955.

All fatalities reported during the year occurred in 70 of the 2,653 mines; thus, 2,583 mines employed 62,351 men daily and operated without a fatality. The fatality-free operations represented 78 percent of the total employment. The mines at which fatalities occurred during 1955 had an average employment of 247 men per mine, compared with 24 men employed in fatality-free mines. Mines where no fatalities occurred had a rate of 38.50 compared with a rate of 51.48 for mines reporting fatalities.

The departments in this publication are underground, surface (at underground mines), and opencut. Opencut mine data include surface operations performed in connection with the mine. Underground data relate only to underground operations. The surface works are operated in connection with underground mines. They are shown under a surface column.

TABLE 1.—*Salient statistics on injuries, injury rates, and employment in the metal industries of the United States and Alaska, 1951–55*

	1951	1952	1953	1954	1955		
					Total	Office workers	Grand total
Injuries:							
Fatal	95	117	92	86	79	---------	79
Nonfatal:							
Permanent total	3	10	---------	9	9	---------	9
Permanent partial	231	298	287	231	290	---------	290
Temporary	6, 590	6, 376	5, 877	4, 754	5, 538	3	5, 541
Total nonfatal	6, 824	6, 684	6, 164	4, 994	5, 837	3	5, 840
Grand total	6, 919	6, 801	6, 256	5, 080	5, 916	3	5, 919
Injury-frequency rates, per million man-hours:							
Fatal	. 60	. 74	. 59	. 66	. 58	---------	. 55
Nonfatal	42. 81	42. 13	39. 36	38. 27	42. 62	. 42	40. 55
Total	43. 41	42. 87	39. 95	38. 93	43. 20	. 42	41. 10
Active mines	2, 857	2, 750	2, 740	2, 700	1, 635	---------	1, 635
Men employed	71, 603	74, 626	72, 529	66, 610	65, 143	3, 192	68, 335
Average days active	278	265	270	245	263	277	263
Man-days worked	19, 913, 318	19, 770, 257	19, 559, 252	16, 293, 664	17, 113, 180	883, 283	17, 996, 463
Man-hours worked	159, 417, 308	158, 648, 566	156, 604, 937	130, 488, 488	136, 950, 227	7, 071, 793	144, 022, 020
Average hours per man per day	8. 01	8. 02	8. 01	8. 01	8. 00	8. 01	8. 00
Average hours per man per year	2, 226	2, 126	2, 159	1, 959	2, 102	2, 215	2, 108

TABLE 2.—*Salient statistics on injuries, injury rates, and employment in the nonmetal industries of the United States and Alaska, 1951–55*

	1951	1952	1953	1954	1955		
					Total	**Office workers**	**Grand total**
Injuries:							
Fatal	17	14	22	9	19	----------	19
Nonfatal:							
Permanent total	1	----------	1	2	2	----------	2
Permanent partial	31	27	53	51	43	----------	43
Temporary	1, 319	1, 144	1, 365	903	1, 111	5	1, 116
Total nonfatal	1, 351	1, 171	1, 419	956	1, 156	5	1, 161
Grand total	1, 368	1, 185	1, 441	965	1, 175	5	1, 180
Injury-frequency rates per million man-hours:							
Fatal	. 56	. 48	. 72	. 30	. 61	----------	. 55
Nonfatal	44. 84	40. 44	46. 54	32. 34	37. 18	1. 34	33. 35
Total	45. 40	40. 92	47. 26	32. 64	37. 79	1. 34	33. 90
Active mines	446	494	626	621	1, 018	----------	1, 018
Men employed	12, 500	12, 447	12, 765	12, 810	14, 504	1, 769	16, 273
Average days active	298	288	292	284	264	255	263
Man-days worked	3, 728, 821	3, 588, 289	3, 727, 298	3, 637, 783	3, 835, 607	450, 427	4, 286, 034
Man-hours worked	30, 130, 424	28, 954, 402	30, 488, 130	29, 563, 983	31, 092, 628	3, 718, 174	34, 810, 802
Average hours per man per day	8. 08	8. 07	8. 18	8. 13	8. 11	8. 25	8. 12
Average hours per man per year	2, 410	2, 326	2, 388	2, 308	2, 144	2, 102	2, 139

TABLE 3.—*Comparative fatal- and nonfatal-injury data for metal and nonmetal mines in the United States and Alaska, 1955*

	Mines with fatal injuries	Mines without fatal injuries	All metal and nonmetal mines
EXCLUDING OFFICE WORKERS			
Active mines	70	2, 583	2, 653
Men employed	17, 296	62, 351	79, 647
Average men per mine	247	24	30
Percentage of total employees	21. 72	78. 28	100. 00
Average days active	294	254	263
Man-days worked	5, 082, 985	15, 865, 802	20, 948, 787
Percent of total man-days	24. 26	75. 74	100. 00
Man-hours worked	40, 284, 908	127, 757, 947	168, 042, 855
Percent of total man-hours	23. 97	76. 03	100. 00
Average hours worked per man per year	2, 329	2, 049	2, 110
Fatalities	98	--------------	98
Nonfatal injuries	2, 074	4, 919	6, 993
Fatality rate per million man-hours	2. 43	--------------	. 58
Nonfatal rate per million man-hours	51. 48	38. 50	41. 61
INCLUDING OFFICE WORKERS			
Active mines	70	2, 583	2, 653
Men employed	17, 296	67, 312	84, 608
Average men per mine	247	26	32
Percentage of total employees	20. 44	79. 56	100. 00
Average days active	294	255	263
Man-days worked	5, 082, 985	17, 199, 512	22, 282, 497
Percent of total man-days	22. 82	77. 18	100. 00
Man-hours worked	40, 284, 908	138, 547, 914	178, 832, 822
Percent of total man-hours	22. 53	77. 47	100. 00
Average hours worked per man per year	2, 329	2, 058	2, 114
Fatalities	98	--------------	98
Nonfatal injuries	2, 074	4, 927	7, 001
Fatality rate per million man-hours	2. 43	--------------	. 55
Nonfatal rate per million man-hours	51. 48	35. 56	39. 15

TABLE 4.—*Number and percentage distribution of injuries at metal and nonmetal mines in the United States, by location, agency, and degree of injury, 1955*

Location and accident agency	Fatal	Permanent total [1]	Permanent partial [2]	Temporary [3]	Total nonfatal	Total fatal and nonfatal	Distribution							
							Fatal				Nonfatal			
							Percent		Frequency rate		Percent		Frequency rate	
							Grand total	Class total	Grand total	Class total	Grand total	Class total	Grand total	Class total
Underground:														
Fall of rock or ore from roof or wall	21	1	54	790	845	866	21.44	35.00	0.12	0.25	12.09	16.23	5.03	9.97
Handling rock or ore	1	-----	16	482	498	499	1.02	1.67	.01	.01	7.12	9.56	2.96	5.88
Handtools	1	2	20	306	328	329	1.02	1.67	.01	.01	4.69	6.30	1.95	3.87
Explosives	5	1	6	33	40	45	5.10	8.33	.03	.06	.57	.77	.24	.47
Haulage	12	-----	41	576	617	629	12.25	20.00	.07	.14	8.83	11.85	3.67	7.28
Falling down chute, winze, raise, or stope	9	1	9	127	137	146	9.17	15.00	.05	.11	1.96	2.63	.82	1.62
Other falls of persons	1	-----	16	405	421	422	1.02	1.67	.01	.01	6.02	8.09	2.51	4.97
Run of ore from raise, chute, or pocket	1	-----	3	168	171	172	1.02	1.67	.01	.01	2.45	3.28	1.02	2.02
Drilling	-----	-----	23	391	414	414	-----	-----	-----	-----	5.92	7.95	2.46	4.89
Electricity	1	-----	2	24	26	27	1.02	1.67	.01	.01	.37	.50	.15	.31
Machinery (other than locomotives or drills)	2	1	22	302	325	327	2.04	3.33	.01	.02	4.65	6.24	1.93	3.84
Mine fires	-----	-----	-----	7	7	7	-----	-----	-----	-----	.10	.13	.04	.08
Suffocation from natural gases	3	-----	-----	5	5	8	3.06	5.00	.02	.04	.07	.10	.03	.06
Inrush of water	1	-----	-----	1	1	2	1.02	1.67	.01	.01	.01	.02	.01	.01
Stepping on nail	-----	-----	-----	65	65	65	-----	-----	-----	-----	.93	1.25	.39	.77
Handling materials (other than rock or ore) and equipment	-----	-----	29	687	716	716	-----	-----	-----	-----	10.24	13.75	4.26	8.45
Other causes	2	2	9	580	591	593	2.04	3.33	.01	.02	8.45	11.35	3.52	6.98
Total underground	60	8	250	4,949	5,207	5,267	61.24	100.00	.36	.71	74.47	100.00	30.99	61.47
Shaft:														
Falling down shaft	5	-----	-----	7	7	12	5.10	45.46	.03	.06	.10	6.73	.04	.08
Objects falling down shaft	3	-----	2	21	23	26	3.06	27.27	.02	.04	.33	22.12	.14	.27
Breaking of cables	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Overwinding	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Cage, skip, or bucket	3	1	3	34	38	41	3.06	27.27	.02	.04	.54	36.54	.23	.45
Other causes	-----	-----	2	34	36	36	-----	-----	-----	-----	.51	34.62	.21	.42
Total shaft	11	1	7	96	104	115	11.22	100.00	.07	.13	1.48	100.00	.62	1.22
Total underground and shaft	71	9	257	5,045	5,311	5,382	72.46	100.00	.42	.84	75.95	100.00	31.61	62.68
Surface:														
Mine cars, mine locomotives, or aerial trams	1	-----	2	34	36	37	1.02	11.11	.01	.03	.51	4.66	.22	1.12
Railway cars or locomotives	-----	-----	-----	13	13	13	-----	-----	-----	-----	.19	1.68	.08	.40
Run or fall of ore in or from ore bins	-----	-----	-----	12	12	12	-----	-----	-----	-----	.17	1.55	.07	.37
Falls of persons	1	-----	5	91	96	97	1.02	11.11	.01	.03	1.37	12.42	.57	2.97
Stepping on nail	-----	-----	-----	9	9	9	-----	-----	-----	-----	.13	1.17	.05	.28
Handtools	-----	-----	2	76	78	78	-----	-----	-----	-----	1.12	10.09	.46	2.41
Electricity	2	-----	-----	5	5	7	2.04	22.22	.01	.06	.07	.65	.03	.15
Machinery (including placer dredging)	-----	-----	12	65	77	77	-----	-----	-----	-----	1.10	9.96	.46	2.38
Handling materials and equipment	1	1	6	258	265	266	1.02	11.11	.01	.03	3.79	34.28	1.58	8.19
Other causes	4	-----	7	175	182	186	4.08	44.45	.02	.12	2.60	23.54	1.08	5.63
Total surface	9	1	34	738	773	782	9.18	100.00	.05	.28	11.05	100.00	4.60	23.90
Total underground, shaft, and surface	80	10	291	5,783	6,084	6,164	81.63	100.00	.48	2.47	87.00	100.00	36.21	51.97

Opencut:														
Falls or slides of rock or ore	6	----------	4	72	76	82	6.12	33.33	.04	.12	1.09	8.36	.45	1.49
Explosives	1	1	3	8	12	13	1.02	5.56	.01	.02	.17	1.32	.07	.23
Haulage	4	----------	2	53	55	59	4.08	22.22	.02	.08	.79	6.06	.33	1.08
Power shovels	2	----------	2	40	42	44	2.04	11.11	.01	.04	.60	4.62	.25	.82
Falls of persons	----------	----------	2	137	139	139	----------	----------	----------	----------	1.99	15.29	.83	2.73
Falls of derricks, booms, etc	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
Run or fall of ore in or from ore bins	1	----------	1	9	10	11	1.02	5.56	.01	.02	.14	1.10	.06	.20
Machinery (other than locomotives or power shovels)	2	----------	7	107	114	116	2.04	11.11	.01	.04	1.63	12.54	.68	2.24
Electricity	----------	----------	----------	4	4	4	----------	----------	----------	----------	.06	.44	.02	.08
Handtools	----------	----------	5	70	75	75	----------	----------	----------	----------	1.07	8.25	.45	1.47
Handling materials and equipment	----------	----------	11	188	199	199	----------	----------	----------	----------	2.85	21.89	1.18	3.90
Other causes	2	----------	5	178	183	185	2.04	11.11	.01	.04	2.62	20.13	1.09	3.59
Total opencut	18	1	42	866	909	927	18.36	100.00	.11	.35	13.00	100.00	5.41	17.83
Total underground, shaft, surface, and opencut	98	11	333	6.649	6,993	7,091	100.00	----------	.58	----------	100.00	----------	41.61	----------
Total office workers	----------	----------	----------	8	8	8	----------	----------	----------	----------	----------	----------	.74	----------
Grand total	98	11	333	6,657	7,001	7,099	100.00	----------	.55	----------	100.00	----------	39.15	----------

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[1] *Permanent total disability.*—Loss or loss of use of both hands, both arms, both legs, both feet, or both eyes or any 2 thereof; or any injury (except death) which permanently and totally incapacitates the injured person from following any gainful occupation.

[2] *Permanent partial disability.*—Loss or loss of use of 1 foot, leg, hand, arm, or eye; or loss of part of bone of 1 of foregoing; or loss or loss of use of 1 or more fingers, 1 great toe, or any 2 or more toes; or permanent impairment of use of any part of the body.

[3] *Temporary.*—Disability for more than remainder of day of accident.

INJURY EXPERIENCE AT DIFFERENT KINDS OF MINES

(Tables 5 and 6)

COPPER MINES

Increased employment was reported in the copper-mining industry in 1955, constituting a gain in the men working and in the man-hours of work performed during the year. Accidents to employees while working at the mines resulted in 26 fatalities and 1,482 injuries. The overall (fatal and nonfatal) injury-frequency rate was 37.23 in 1955 compared with 31.74 for the preceding year. The fatality rate was 28 percent lower in 1955 than in 1954. The average men at work increased 6 percent; total man-hours increased 12 percent. The average employee accumulated a total of 2,382 hours and worked a 7.95-hour shift.

IRON MINES

In 1955 iron-ore mines showed a decrease in men employed and in the man-hours worked. Accidents during 1955 resulted in 15 fatalities and 776 nonfatal lost-time injuries. These injuries resulted in a fatality rate of 0.31 per million man-hours (compared with the rate of 0.28 in 1954) and a nonfatal-injury rate of 15.86 in 1955 (compared with 14.50 in 1954)—an increase of 11 and 9 percent, respectively. The average employee at iron mines had a workyear totaling 1,961 hours and worked an 8.02-hour shift.

GOLD-SILVER LODE MINES

The men employed and the man-hours worked in the gold-silver lode mines decreased slightly in 1955. Fatalities were increased by 4 or 67 percent. Nonfatal injuries decreased by 108 or 18 percent, resulting in a combined (fatal- and nonfatal-) injury-frequency rate of 80.35 per million man-hours. The average employee worked 2,129 hours during the year on a 7.99-hour basis during 1955.

GOLD PLACER MINES

The safety record at gold placer mines was not as favorable in 1955 as in 1954 due to an increase in nonfatal injuries. Dredging operations reported the greatest increase in nonfatal injuries. The injury-frequency rate of 55.75 was 131 percent higher than the combined fatal and nonfatal rate of 24.15 in 1954. There was a decrease in operations in all departments of the gold-placer-mining industry. The average employee worked 1,820 hours during 1955 on an 8.50-hour basis.

MISCELLANEOUS METAL MINES

This group included mines that produce antimony, bauxite, chromite, manganese, mercury, molybdenum, pyrite, titanium, tungsten, vanadium-uranium, cobalt, and minor metals. The safety record for this group improved in comparison with 1954. Twelve fatalities were reported, which resulted in a drop in the fatality-frequency rate from 1.04 in 1954 to 0.79 in 1955 (24 percent). Nonfatal injuries, however, increased from 1,068 in 1954 to 1,379 in 1955 (29 percent). The rate at which nonfatal injuries occurred in 1955 increased 15 percent over 1954. The average employee at miscellaneous metal operations worked 2,058 hours in 1955, on a daily 8.02-hour shift.

NONMETAL MINES

Based on the men working, employment in the nonmetal mines increased considerably in 1955 (13 percent); man-hours worked increased 5 percent. There was a marked increase in both fatal and nonfatal injuries. Fatalities reported for 1955 numbered 19, and 9 for 1954—an 111-percent increase. Nonfatal injuries increased from 956 reported for 1954 to 1,156 in 1955 (21 percent). The combined (fatal- and nonfatal-) injury-frequency rate increased from 32.64 in 1954 to 37.79 per million man-hours in 1955 (16 percent). Men employed increased 1,694—a gain of 13 percent. Each employee worked an average of 2,144 hours on an 8.11-hour shift during 1955.

Table 5.—*Employment data and injury experience at all metal and nonmetal mines in the United States and Alaska, by mineral and location, 1955*

Kind of mine	Active mines	Men employed						Average days active					
		Under-ground	Surface	Opencut	Total	Office workers	Grand total	Under-ground	Surface	Opencut	Total	Office workers	Grand total
Copper	140	7,487	2,224	7,289	17,000	496	17,496	292	283	312	299	304	300
Iron	216	10,811	4,660	9,483	24,954	793	25,747	239	247	249	245	256	245
Lead-zinc	220	9,567	2,029	60	11,656	1,005	12.661	256	257	235	256	268	257
Gold-silver lode	176	2,298	517	79	2,894	51	2,945	273	260	110	266	273	266
Placer	129	13	1,260	28	1,301	48	1,349	138	218	88	214	296	217
Miscellaneous metals	754	4,956	1,013	1,369	7,338	799	8,137	269	273	200	257	292	260
Total, metal mines	1,635	35,132	11,703	18,308	65,143	3,192	68,335	261	255	270	263	277	263
Nonmetal	1,018	5,149	3,000	6,355	14,504	1,769	16,273	281	333	219	264	255	263
Total, metal and nonmetal	2,653	40,281	14,703	24,663	79,647	4,961	84,608	264	271	257	263	269	263

Kind of mine	Active mines	Number of injuries											
		Fatal						Nonfatal					
		Under-ground	Surface	Opencut	Total	Office workers	Grand total	Under-ground	Surface	Opencut	Total	Office workers	Grand total
Copper	140	20	2	4	26	----------	26	1,109	85	288	1,482	2	1,484
Iron	216	8	2	5	15	----------	15	528	73	175	776	----------	776
Lead-zinc	220	15	1	----------	16	----------	16	1,487	88	8	1,583	1	1,584
Gold-silver lode	176	9	1	----------	10	----------	10	432	51	2	485	----------	485
Placer	129	----------	----------	----------	----------	----------	----------	----------	131	1	132	----------	132
Miscellaneous metals	754	10	1	1	12	----------	12	1,131	166	82	1,379	----------	1,379
Total, metal mines	1,635	62	7	10	79	----------	79	4,687	594	556	5,837	3	5,840
Nonmetal	1,018	9	2	8	19	----------	19	624	179	353	1,156	5	1,161
Total, metal and nonmetal	2,653	71	9	18	98	----------	98	5,311	773	909	6,993	8	7,001

Kind of mine	Active mines	Man-days worked						Man-hours worked					
		Under ground	Surface	Opencut	Total	Office workers	Grand total	Under ground	Surface	Opencut	Total	Office workers	Grand total
Copper	140	2,187,118	629,909	2,274,248	5,091,275	150,907	5,242,182	17,087,202	5,279,190	18,133,500	40,499,892	1,207,257	41,707,149
Iron	216	2,586,335	1,153,161	2,365,896	6,105,392	203,194	6,308,586	20.694,246	9,237,290	19,009,135	48,940,671	1,624,437	50,565,108
Lead-zinc	220	2,448,082	521,497	14,115	2,983,694	267,535	3,251,229	19,580,261	4,182,649	117,196	23,880,106	2,138,544	26,018,650
Gold-silver lode	176	627,783	134,200	8,676	770,659	13,930	784,589	5,017,744	1,073,115	69,934	6,160,793	108,298	6,269,091
Placer	129	1,798	274,261	2,466	278,525	14,230	292,755	14,024	2,331,053	22,839	2,367,916	115,856	2,483,772
Miscellaneous metals	754	1,333,991	276,345	273,299	1,883,635	233,487	2,117,122	10,684,289	2,218,017	2,198,543	15,100,849	1,877,401	16,978,250
Total, metal mines	1,635	9,185,107	2,989,373	4,938,700	17,113,180	883,283	17,996,463	73,077,766	24,321,314	39,551,147	136,950,227	7,071,793	144,022,020
Nonmetal	1,018	1,444,777	1,000,182	1,390,648	3,835,607	450,427	4,286,034	11,648,476	8,016,874	11,427,278	31,092,628	3,718,174	34,810,802
Total, metal and nonmetal	2,653	10,629,884	3,989,555	6,329,348	20,948,787	1,333,710	22,282,497	84,726,242	32,338,188	50,978,425	168,042,855	10,789,967	178,832,822

	Active mines	Injury-frequency rates per million man-hours											
		Fatal						Nonfatal					
		Under ground	Surface	Opencut	Total	Office workers	Grand total	Under ground	Surface	Opencut	Total	Office workers	Grand total
Copper	140	1.17	0.38	0.22	0.64	------------	0.62	64.90	16.10	15.88	36.59	1.66	35.58
Iron	216	.39	.22	.26	.31	------------	.30	25.51	7.90	9.21	15.86	------------	15.35
Lead-zinc	220	.77	.24	------------	.67	------------	.61	75.94	21.04	68.26	66.29	.47	60.88
Gold-silver lode	176	1.79	.93	------------	1.62	------------	1.60	86.09	47.53	28.60	78.72	------------	77.36
Placer	129	------------	------------	------------	------------	------------	------------	------------	56.20	43.78	55.75	------------	53.14
Miscellaneous metals	754	.94	.45	.45	.79	------------	.71	105.86	74.84	37.30	91.32	------------	81.22
Total, metal mines	1,635	.85	.29	.25	.58	------------	.55	64.14	24.42	14.06	42.62	.42	40.55
Nonmetal	1,018	.77	.25	.70	.61	------------	.55	53.57	22.33	30.89	37.18	1.34	33.35
Total, metal and nonmetal	2,653	.84	.28	.35	.58	------------	.55	62.68	23.90	17.83	41.61	.74	39.15

TABLE 6.—*All mines: Injuries in metal and nonmetal mines, by location, agency, severity, and kind of mineral, 1955*

[Excluding office workers]

Kind of mineral and severity of injury	Underground																		Shaft							Total underground and shaft
	Fall of rock or ore from roof or wall	Handling rock or ore while loading at working face	Handtools	Explosives	Haulage	Falling down chute, winze, raise, or stope	Other falls of persons	Run of ore from chute or pocket	Drilling	Electricity	Machinery (other than locomotives or drills)	Mine fires	Suffocation from natural gases	Inrush of water	Stepping on nail	Handling materials (other than rock or ore) and equipment	Other causes	Total underground	Falling down shaft	Objects falling down shaft	Breaking of cables	Overwinding	Cage, skip, or bucket	Other causes	Total shaft	
Total fatal and nonfatal:																										
Copper	203	109	65	8	133	27	74	44	50	2	64	5	1	------	18	195	79	1,077	5	14	------	------	18	15	52	1,129
Iron	83	24	26	12	47	17	66	41	43	7	30	------	------	------	4	74	53	527	2	3	------	------	3	1	9	536
Lead and zinc	256	142	99	4	225	38	121	50	137	4	73	------	4	2	12	188	128	1,483	3	2	------	------	8	6	19	1,502
Gold-silver	55	19	31	4	67	18	36	9	39	1	18	------	------	------	11	47	79	434	1	1	------	------	4	1	7	441
Placer	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Miscellaneous	188	127	70	15	92	32	100	23	117	4	74	1	3	------	17	109	155	1,127	1	1	------	------	3	9	14	1,141
Total metal mines	785	421	291	43	564	132	397	167	386	18	259	6	8	2	62	613	494	4,648	12	21	------	------	36	32	101	4,749
Nonmetal	81	78	38	2	65	14	25	5	28	9	68	1	------	------	3	103	99	619	------	5	------	------	5	4	14	633
Total: 1955	866	499	329	45	629	146	422	172	414	27	327	7	8	2	65	716	593	5,267	12	26	------	------	41	36	115	5,382
1954	754	325	273	44	520	136	315	191	474	31	256	2	9	------	49	632	604	4,615	9	18	1	1	35	21	85	4,700
Change in 1955...percent	+14.9	+53.5	+20.5	+2.3	+21.0	+7.4	+34.0	−10.0	−12.7	−12.9	+27.7	+250.0	−11.1	+100.0	+32.7	+13.3	−1.8	+14.1	+33.3	+44.4	−100.0	−100.0	+17.1	+71.4	+35.3	+14.5
Fatal:																										
Copper	6	------	------	------	4	2	------	------	------	------	------	------	------	------	------	------	1	13	2	3	------	------	2	------	7	20
Iron	3	------	1	3	------	------	1	------	------	------	------	------	------	------	------	------	------	8	------	------	------	------	------	------	------	8
Lead and zinc	6	------	------	1	2	2	------	1	------	------	------	------	1	1	------	------	------	14	1	------	------	------	------	------	1	15
Gold-silver	2	------	------	------	3	3	------	------	------	------	------	------	------	------	------	------	------	8	1	------	------	------	------	------	1	9
Placer	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Miscellaneous	------	1	------	1	2	1	------	------	------	------	2	------	2	------	------	------	------	9	1	------	------	------	------	------	1	10
Total metal mines	17	1	1	5	11	8	1	1	------	------	2	------	3	1	------	------	1	52	5	3	------	------	2	------	10	62
Nonmetal	4	------	------	------	1	1	------	------	------	1	------	------	------	------	------	------	1	8	------	------	------	------	1	------	1	9
Total	21	1	1	5	12	9	1	1	------	1	2	------	3	1	------	------	2	60	5	3	------	------	3	------	11	71
Total nonfatal:																										
Copper	197	109	65	8	129	25	74	44	50	2	64	5	1	------	18	195	78	1,064	3	11	------	------	16	15	45	1,109
Iron	80	24	25	9	47	17	65	41	43	7	30	------	------	------	4	74	53	519	2	3	------	------	3	1	9	528
Lead and zinc	250	142	99	3	223	36	121	49	137	4	73	------	3	1	12	188	128	1,469	2	2	------	------	8	6	18	1,487
Gold-silver	53	19	31	4	64	15	36	9	39	1	18	------	------	------	11	47	79	426	------	1	------	------	4	1	6	432
Placer	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Miscellaneous	188	126	70	14	90	31	100	23	117	4	72	1	1	------	17	109	155	1,118	------	1	------	------	3	9	13	1,131
Total metal mines	768	420	290	38	553	124	396	166	386	18	257	6	5	1	62	613	493	4,596	7	18	------	------	34	32	91	4,687
Nonmetal	77	78	38	2	64	13	25	5	28	8	68	1	------	------	3	103	98	611	------	5	------	------	4	4	13	624
Total	845	498	328	40	617	137	421	171	414	26	325	7	5	1	65	716	591	5,207	7	23	------	------	38	36	104	5,311

Permanent total:																										
Copper	1			1		1												3					1		1	4
Iron			1															1								1
Lead and zinc											1							1								1
Gold-silver																										
Placer																										
Miscellaneous																	1	1								1
Total metal mines	1		1	1		1					1						1	6					1		1	7
Nonmetal			1														1	2								2
Total	1		2	1		1					1						2	8					1		1	9
Permanent partial:																										
Copper	9	7	5	1	13	3	3		2		3					7	1	54		1			1	1	3	57
Iron	10	1	3	1	5	1	1		4	1	4					4	1	36								36
Lead and zinc	16	4	9		12	3	8	2	9	1	7					12	1	84		1			1		2	86
Gold-silver	2	1			1				1		1						1	7					1		1	8
Placer																										
Miscellaneous	11	2	3	4	7	2	3		5		4					4	2	47					1		1	48
Total metal mines	48	15	20	6	38	9	15	2	21	2	19					27	6	228		2			4	1	7	235
Nonmetal	6	1			3		1	1	2		3					2	3	22								22
Total	54	16	20	6	41	9	16	3	23	2	22					29	9	250		2			4	1	7	257
Temporary:																										
Copper	187	102	60	6	116	21	71	44	48	2	61	5	1		18	188	77	1, 007	3	10			14	14	41	1, 048
Iron	70	23	21	8	42	16	64	41	39	6	26				4	70	52	482	2	3			3	1	9	491
Lead and zinc	234	138	90	3	211	33	113	47	128	3	65		3	1	12	176	127	1, 384	2	1			7	6	16	1, 400
Gold-silver	51	18	31	4	63	15	36	9	38	1	17				11	47	78	419		1			4		5	424
Placer																										
Miscellaneous	177	124	67	10	83	29	97	23	112	4	68	1	1		17	105	152	1, 070		1			2	9	12	1, 082
Total metal mines	719	405	269	31	515	114	381	164	365	16	237	6	5	1	62	586	486	4, 362	7	16			30	30	83	4, 445
Nonmetal	71	77	37	2	61	13	24	4	26	8	65	1			3	101	94	587		5			4	4	13	600
Total	790	482	306	33	576	127	405	168	391	24	302	7	5	1	65	687	580	4, 949	7	21			34	34	96	5, 045

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TABLE 6.—*All mines: Injuries in metal and nonmetal mines, by location, agency, severity, and kind of mineral, 1955*—Continued

[Excluding office workers]

Kind of mineral and severity of injury	Surface											Grand total underground, shaft, and surface	Opencut													Grand total
	Mine cars, locomotives, or aerial trams	Railway cars and locomotives	Run or fall of ore in or from bins	Falls of persons	Stepping on nail	Handtools	Electricity	Machinery	Handling materials	Other causes	Total surface		Falls or slides of rock or ore	Explosives	Haulage	Power shovels	Falls of persons	Falls of derricks, booms, etc.	Run or fall of ore in or from bins	Machinery (other than locomotives or power shovels)	Electricity	Handtools	Handling materials	Other causes	Total opencut	
Total fatal and nonfatal:																										
Copper	1	3	3	12	------	7	------	14	42	5	87	1,216	24	2	21	15	36	------	------	33	3	27	57	74	292	1,508
Iron	3	5	2	16	------	7	1	5	19	17	75	611	10	2	18	12	38	------	4	19	------	11	38	28	180	791
Lead and zinc	10	1	1	12	6	7	2	5	33	12	89	1,591	2	------	------	------	------	------	------	1	------	------	4	1	8	1,599
Gold-silver	2	1	1	8	------	8	1	7	15	9	52	493	------	------	------	------	------	------	------	------	------	------	2	------	2	495
Placer	------	------	------	15	------	20	------	7	39	50	131	131	------	1	------	------	------	------	------	------	------	------	------	------	1	132
Miscellaneous	15	1	5	14	3	16	1	17	63	32	167	1,308	13	3	4	6	12	------	1	16	------	5	5	18	83	1,391
Total metal mines	31	11	12	77	9	65	5	55	211	125	601	5,350	49	8	43	33	86	------	5	69	3	43	106	121	566	5,916
Nonmetal	6	2	------	20	------	13	2	22	55	61	181	814	33	5	16	11	53	------	6	47	1	32	93	64	361	1,175
Total: 1955	37	13	12	97	9	78	7	77	266	186	782	6,164	82	13	59	44	139	------	11	116	4	75	199	185	927	7,091
1954	13	5	14	94	5	50	8	105	177	195	666	5,366	39	12	68	44	100	5	4	93	15	69	114	116	679	6,045
Change in 1955...percent	+184.6	+160.0	−14.3	+3.2	+80.0	+56.0	−12.5	−26.7	+50.3	−4.6	+17.4	+14.9	+110.3	+8.3	−13.2	0.0	+39.0	−100.0	+175.0	+24.7	−73.3	+8.7	+74.6	+59.5	+136.5	+17.3
Fatal:																										
Copper	------	------	------	1	------	------	------	------	1	------	2	22	2	------	2	------	------	------	------	------	------	------	------	------	4	26
Iron	------	------	------	------	------	------	1	------	------	1	2	10	------	1	2	1	------	------	------	1	------	------	------	------	5	15
Lead and zinc	1	------	------	------	------	------	------	------	------	------	1	16	------	------	------	------	------	------	------	------	------	------	------	------	------	16
Gold-silver	------	------	------	------	------	------	------	------	------	1	1	10	------	------	------	------	------	------	------	------	------	------	------	------	------	10
Placer	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Miscellaneous	------	------	------	------	------	------	------	------	------	1	1	11	1	------	------	------	------	------	------	------	------	------	------	------	1	12
Total metal mines	1	------	------	1	------	------	1	------	1	3	7	69	3	1	4	1	------	------	------	1	------	------	------	------	10	79
Nonmetal	------	------	------	------	------	------	1	------	------	1	2	11	3	------	------	1	------	------	1	1	------	------	------	2	8	19
Total	1	------	------	1	------	------	2	------	1	4	9	80	6	1	4	2	------	------	1	2	------	------	------	2	18	98
Total nonfatal:																										
Copper	1	3	3	11	------	7	------	14	41	5	85	1,194	22	2	19	15	36	------	------	33	3	27	57	74	288	1,482
Iron	3	5	2	16	------	7	------	5	19	16	73	601	10	1	16	11	38	------	4	18	------	11	38	28	175	776
Lead and zinc	9	1	1	12	6	7	2	5	33	12	88	1,575	2	------	------	------	------	------	------	1	------	------	4	1	8	1,583
Gold-silver	2	1	1	8	------	8	1	7	15	8	51	483	------	------	------	------	------	------	------	------	------	------	2	------	2	485
Placer	------	------	------	15	------	20	------	7	39	50	131	131	------	1	------	------	------	------	------	------	------	------	------	------	1	132
Miscellaneous	15	1	5	14	3	16	1	17	63	31	166	1,297	12	3	4	6	12	------	1	16	------	5	5	18	82	1,379
Total metal mines	30	11	12	76	9	65	4	55	210	122	594	5,281	46	7	39	32	86	------	5	68	3	43	106	121	556	5,837
Nonmetal	6	2	------	20	------	13	1	22	55	60	179	803	30	5	16	10	53	------	5	46	1	32	93	62	353	1,156
Total	36	13	12	96	9	78	5	77	265	182	773	6,084	76	12	55	42	139	------	10	114	4	75	199	183	909	6,993

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Permanent total:																										
Copper												4														4
Iron												1		1											1	2
Lead and zinc												1														1
Gold-silver																										
Placer																										
Miscellaneous									1		1	2														2
Total metal mines									1		1	8		1											1	9
Nonmetal												2														2
Total									1		1	10		1											1	11
Permanent partial:																										
Copper								3		1	4	61	1	2	1							3	3	2	12	73
Iron								1	1	1	3	39			1	1			1	5		1	7	1	17	56
Lead and zinc	2			1				1	1	1	6	92														92
Gold-silver									1		1	9														9
Placer								1			1	1		1											1	2
Miscellaneous				2					2	1	5	53	2				1							2	5	58
Total metal mines	2			3				6	5	4	20	255	3	3	2	1	1		1	5		4	10	5	35	290
Nonmetal				2		2		6	1	3	14	36	1			1	1			2		1	1		7	43
Total	2			5		2		12	6	7	34	291	4	3	2	2	2		1	7		5	11	5	42	333
Temporary:																										
Copper	1	3	3	11		7		11	41	4	81	1, 129	21		18	15	36			33	3	24	54	72	276	1, 405
Iron	3	5	2	16		7		4	18	15	70	561	10		15	10	38		3	13		10	31	27	157	718
Lead and zinc	7	1	1	11	6	7	2	4	32	11	82	1, 482	2							1			4	1	8	1, 490
Gold-silver	2	1	1	8		8	1	7	14	8	50	474											2		2	476
Placer				15		20		6	39	50	130	130														130
Miscellaneous	15	1	5	12	3	16	1	17	60	30	160	1, 242	10	3	4	6	11		1	16		5	5	16	77	1, 319
Total metal mines	28	11	12	73	9	65	4	49	204	118	573	5, 018	43	3	37	31	85		4	63	3	39	96	116	520	5, 538
Nonmetal	6	2		18		11	1	16	54	57	165	765	29	5	16	9	52		5	44	1	31	92	62	346	1, 111
Total	34	13	12	91	9	76	5	65	258	175	738	5, 783	72	8	53	40	137		9	107	4	70	188	178	866	6, 649

INJURY EXPERIENCE AT METALLURGICAL PLANTS

(Tables 7–9)

Metallurgical plants include metal ore-dressing plants and auxiliaries and smelters (nonferrous reduction and refinery plants and auxiliaries). The safety record for this group improved slightly in 1955. There were five fewer fatalities (a decrease of 31 percent). Nonfatal injuries increased somewhat in 1955 (4 percent). The combined (fatal and nonfatal) injury-frequency rate per million man-hours revealed a 5-percent decrease. A 6-percent gain in employment averaged 2,526 hours of work for each man on an 8.04-hour basis during the year.

TABLE 7.—*Metallurgical plants: Employment data and injury experience, by industry groups, 1955* [1]

Industry	Men employed			Average active plant days			Man-days worked		
	Production workers	Office workers	Total	Production workers	Office workers	Total	Production workers	Office workers	Total
Copper	17,913	1,263	19,176	313	273	310	5,603,226	344,805	5,948,031
Gold-silver lode	408	----------	408	298	----------	298	121,420	----------	121,420
Iron	4,055	----------	4,055	258	----------	258	1,044,212	----------	1,044,212
Lead-zinc	16,240	1,278	17,518	301	267	299	4,889,057	341,181	5,230,238
Miscellaneous metals [2]	19,125	1,234	20,359	339	254	334	6,491,935	313,729	6,805,664
Total	57,741	3,775	61,516	314	265	311	18,149,850	999,715	19,149,565

Industry	Man-hours worked			Injuries						Injury-frequency rates per million man-hours					
				Fatal			Nonfatal			Fatal			Nonfatal		
	Production workers	Office workers	Total	Production workers	Office workers	Total	Production workers	Office workers	Total	Production workers	Office workers	Total	Production workers	Office workers	Total
Copper	45,515,748	2,739,366	48,255,114	5	-------	5	610	4	614	0.11	-------	0.10	13.40	1.46	12.72
Gold-silver lode	971,223	-------	971,223	-------	-------	-------	43	-------	43	-------	-------	-------	44.27	-------	44.27
Iron	8,383,134	-------	8,383,134	2	-------	2	87	-------	87	.24	-------	.24	10.38	-------	10.38
Lead-zinc	39,028,340	2,698,387	41,726,727	1	-------	1	982	-------	982	.03	-------	.02	25.16	-------	23.53
Miscellaneous metals [2]	51,942,021	2,846,266	54,788,287	3	-------	3	972	-------	972	.06	-------	.05	18.71	-------	17.74
Total	145,840,466	8,284,019	154,124,485	11	-------	11	2,694	4	2,698	.08	-------	.07	18.47	.48	17.51

[1] Includes smelters, primary nonferrous reduction and refinery plants, and ore-dressing plants.

[2] Includes aluminum, antimony, bauxite, chromite, cobalt, manganese, magnesium, mercury, molybdenum, pyrite, tin, titanium, tungsten, vanadium-uranium and minor metals.

Table 8.—*Smelters: Primary nonferrous reduction and refinery plants, by industry groups, 1955* [1]

Industry	Men employed			Average active plant days			Man-days worked		
	Production workers	Office workers	Total	Production workers	Office workers	Total	Production workers	Office workers	Total
Copper	11, 691	1, 263	12, 954	312	273	308	3, 651, 422	344, 805	3, 996, 227
Lead	3, 506	362	3, 868	284	249	281	996, 977	90, 252	1, 087, 229
Zinc	9, 067	916	9, 983	339	274	333	3, 074, 960	250, 929	3, 325, 889
Miscellaneous metals [2]	15, 846	1, 234	17, 080	347	254	340	5, 491, 137	313, 729	5, 804, 866
Total	40, 110	3, 775	43, 885	329	265	324	13, 214, 496	999, 715	14, 214, 211

Industry	Man-hours worked			Injuries						Injury-frequency rates per million man-hours					
				Fatal			Nonfatal			Fatal			Nonfatal		
	Production workers	Office workers	Total	Production workers	Office workers	Total	Production workers	Office workers	Total	Production workers	Office workers	Total	Production workers	Office workers	Total
Copper	29, 661, 324	2, 739, 366	32, 400, 690	5	--------	5	401	4	405	0. 17	--------	0. 15	13. 52	1. 46	12. 50
Lead	7, 975. 797	722, 010	8, 697, 807	1	--------	1	137	--------	137	. 13	--------	. 11	17. 18	--------	15. 75
Zinc	24, 437, 536	1, 976, 377	26, 413, 913	--------	--------	------	692	--------	692	--------	--------	------	28. 32	--------	26. 20
Miscellaneous metals [2]	43, 929, 084	2, 846, 266	46, 775, 350	2	--------	2	669	--------	669	. 05	--------	. 04	15. 23	--------	14. 30
Total	106, 003, 741	8, 284, 019	114, 287, 760	8	--------	8	1, 899	4	1, 903	. 08	--------	. 07	17. 91	. 48	16. 65

[1] Includes smelters, refineries, and roasting electrolytic, retort, and all other nonferrous-metal reduction or refining plants.
[2] Includes aluminum, antimony, magnesium, mercury, tin, and titanium.

Table 9.—*Ore-dressing plants: Employment data and injury experience, by industry groups, 1955* [1]

Industry	Men employed	Average active plant days	Man-days worked	Man-hours worked	Injuries		Injury-frequency rates per million man-hours	
					Fatal	Nonfatal	Fatal	Nonfatal
Copper	6, 222	314	1, 951, 804	15, 854, 424	--------	209	--------	13. 18
Gold-silver lode	408	298	121, 420	971, 223	--------	43	--------	44. 27
Iron	4, 055	258	1, 044, 212	8, 383, 134	2	87	0. 24	10. 38
Lead-zinc	3, 667	223	817, 120	6, 615, 007	--------	153	--------	23. 13
Miscellaneous metals [2]	3, 279	305	1, 000, 798	8, 012, 937	1	303	. 12	37. 81
Total	17, 631	280	4, 935, 354	39, 836, 725	3	795	. 08	19. 96

[1] Includes crushers, grinders, washers, ore-concentration, sintering, cyaniding, leaching, and all other metallic ore-dressing plants and auxiliary works.
[2] Includes antimony, bauxite, chromite, cobalt, manganese, mercury, molybdenum, pyrite, titanium, tungsten, vanadium-uranium and minor metals.

INJURY EXPERIENCE, BY STATES AND ALASKA

(Tables 10–19)

Injury data on metal and nonmetal mines, employing 1,000 men or more in 1955, showed that only 2 (Wisconsin and Tennessee) of the 22 States represented reported no fatalities; 10 States had fatality rates lower than those reported in 1954. These States, in order of their volume of employment, were Michigan, Arizona, Utah, Idaho, California, New Mexico, Nevada, New York, South Dakota, and Alaska. Twelve States reporting nonfatal-injury-frequency rates lower than the industry average were Florida, Minnesota, Alabama, Louisiana, Tennessee, Pennsylvania, Michigan, Texas, New York, Utah, Missouri, and Montana.

TABLE 10.—*Relative standing of States and Alaska employing 1,000 men or more in metal and nonmetal mines, 1955*

Excluding office workers								Including office workers							
Relative standing by employment	State	Men employed	Relative standing (fatalities)	State	Fatality rate [1]	Relative standing (nonfatal injuries)	State	Nonfatal injury rate [1]	Relative standing by employment	State	Men employed	Relative standing (fatalities)	State	Fatality rate [1]	Relative standing (nonfatal injuries)	State	Nonfatal injury rate [1]
1	Minnesota	10,725	1	Wisconsin	--------	1	Florida	5.57	1	Minnesota	11,149	1	Wisconsin	--------	1	Florida	5.11
2	Michigan	8,256	2	Tennessee	--------	2	Minnesota	9.02	2	Michigan	8,359	2	Tennessee	--------	2	Minnesota	8.66
3	Arizona	7,779	3	New Mexico	0.13	3	Alabama	9.29	3	Arizona	8,107	3	New Mexico	0.12	3	Alabama	9.14
4	Montana	5,795	4	Minnesota	.14	4	Louisiana	13.60	4	Montana	6,070	4	Minnesota	.13	4	Louisiana	13.50
5	Utah	4,807	5	Louisiana	.30	5	Tennessee	18.55	5	Utah	4,965	5	California	.29	5	Tennessee	17.91
6	Idaho	3,766	6	Michigan	.31	6	Pennsylvania	22.20	6	Idaho	3,922	6	Louisiana	.29	6	Pennsylvania	20.24
7	California	3,228	7	Florida	.33	7	Michigan	25.35	7	California	3,643	7	Florida	.30	7	Michigan	25.02
8	New Mexico	3,113	8	California	.34	8	Texas	30.08	8	Colorado	3,531	8	Michigan	.31	8	Missouri	26.47
9	Colorado	3,108	9	Utah	.36	9	New York	30.17	9	Missouri	3,263	9	Utah	.35	9	New York	27.56
10	Alabama	3,075	10	North Carolina	.44	10	Utah	30.64	10	New Mexico	3,250	10	North Carolina	.41	10	Texas	28.34
11	Nevada	2,942	11	Alaska	.49	11	Missouri	37.73	11	Alabama	3,124	11	Alaska	.47	11	Utah	29.65
12	Missouri	2,324	12	Arizona	.58	12	Montana	40.80	12	Nevada	3,064	12	Missouri	.48	12	Montana	38.64
13	New York	1,939	13	Texas	.60	13	Arizona	48.43	13	New York	2,141	13	Arizona	.56	13	Arizona	46.50
14	Florida	1,439	14	New York	.69	14	Wisconsin	50.36	14	Florida	1,570	14	Texas	.56	14	Wisconsin	49.52
15	Wisconsin	1,351	15	Missouri	.69	15	North Carolina	56.24	15	Wisconsin	1,373	15	New York	.63	15	North Carolina	52.86
16	Tennessee	1,315	16	Alabama	.71	16	New Mexico	58.08	16	Texas	1,368	16	Alabama	.70	16	New Mexico	55.83
17	Texas	1,272	17	Nevada	.78	17	South Dakota	63.53	17	Tennessee	1,356	17	Nevada	.75	17	California	60.89
18	Louisiana	1,217	18	Idaho	.85	18	Alaska	66.76	18	North Carolina	1,264	18	Idaho	.81	18	Colorado	61.66
19	South Dakota	1,207	19	Colorado	1.08	19	California	69.29	19	Louisiana	1,228	19	Colorado	.93	19	South Dakota	62.67
20	North Carolina	1,192	20	Montana	1.27	20	Colorado	71.37	20	South Dakota	1,225	20	Montana	1.20	20	Alaska	63.92
21	Alaska	1,121	21	Pennsylvania	1.59	21	Nevada	88.61	21	Alaska	1,156	21	Pennsylvania	1.45	21	Nevada	85.46
22	Pennsylvania	1,005	22	South Dakota	1.73	22	Idaho	104.30	22	Pennsylvania	1,101	22	South Dakota	1.70	22	Idaho	99.70
	U.S. total [2]	79,647		U.S. average, fatalities.	.58		U.S. average, nonfatal injuries.	41.61		U.S. total [2]	84,608		U.S. average, fatalities.	.55		U.S. average, nonfatal injuries.	39.15

[1] Based on fatal and nonfatal injuries per million man-hours.

[2] U.S. total represents all States, regardless of men employed.

TABLE 11.—*Active metal and nonmetal mines, men working, man-days and man-hours worked, and injuries and injury-frequency rates at metal and nonmetal mines in the United States and Alaska, by location and State, 1955*

State	Active mines	Men employed						Man-days worked						Man-hours worked					
		Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total
Alabama	40	2,292	315	468	3,075	49	8,124	512,604	70,426	104,506	687,536	11,504	699,040	4,104,270	646,274	844,981	5,595,525	94,523	5,690,048
Alaska	109	54	32	1,035	1,121	35	1,156	9,380	1,926	225,340	236,646	9,996	246,642	77,420	18,112	1,941,557	2,037,089	90,519	2,127,608
Arizona	136	3,728	3,089	962	7,779	328	8,107	1,120,093	962,729	254,258	2,337,080	97,681	2,434,764	8,958,608	7,639,807	2,273,889	18,872,304	781,584	19,653,888
Arkansas	18	318	231	68	617	82	699	104,542	51,693	21,894	178,129	20,992	199,121	836,340	418,996	175,151	1,430,487	172,072	1,602,559
California	443	1,576	1,072	580	3,228	415	3,643	375,073	209,302	151,304	735,679	111,501	847,180	3,002,480	1,716,349	1,212,679	5,931,508	883,683	6,815,191
Colorado	325	2,449	163	496	3,108	423	3,531	647,740	31,721	131,816	811,277	127,809	939,086	5,181,179	252,164	1,054,323	6,487,666	1,021,234	7,508,900
Florida	25	-------	1,439	-------	1,439	131	1,570	-------	372,447	-------	372,447	33,896	406,343	-------	3,054,187	-------	3,054,187	272,435	3,326,622
Georgia	47	33	528	11	572	139	711	7,530	133,893	2,610	144,033	39,637	183,670	68,540	1,127,389	22,776	1,218,705	306,297	1,525,002
Idaho	81	2,493	363	910	3,766	156	3,922	633,322	30,023	216,426	879,771	31,629	911,400	5,065,725	240,989	1,740,409	7,047,123	325,178	7,372,301
Illinois	27	265	43	52	360	51	411	71,391	12,549	14,828	98,768	13,499	112,267	571,130	100,390	118,626	790,146	107,995	898,141
Indiana	3	32	20	2	54	-------	54	2,573	5,632	160	8,365	-------	8,365	20,583	45,056	1,280	66,919	-------	66,919
Iowa	23	-------	185	-------	185	-------	185	-------	50,433	-------	50,433	-------	50,433	-------	406,399	-------	406,399	-------	406,399
Kansas	22	322	15	43	380	6	386	90,603	4,365	11,801	106,769	1,655	108,424	724,818	34,916	94,407	854,141	13,240	867,381
Kentucky	31	208	167	59	434	21	455	44,105	24,210	9,964	78,279	5,704	83,983	351,763	192,358	81,089	625,210	47,723	672,933
Louisiana	15	105	24	1,088	1,217	11	1,228	28,855	2,922	388,374	420,151	3,075	423,226	250,393	23,376	3,109,598	3,383,367	24,601	3,407,968
Maryland	8	32	23	3	58	21	79	7,300	3,731	771	11,802	5,460	17,262	58,400	29,494	6,168	94,062	43,680	137,742
Michigan	58	5,946	305	2,005	8,256	103	8,359	1,452,224	55,697	488,950	1,996,871	26,106	2,022,977	11,617,830	446,380	3,911,588	15,975,798	209,094	16,184,892
Minnesota	124	1,193	7,830	1,702	10,725	424	11,149	291,198	1,969,516	442,228	2,702,942	110,586	2,813,528	2,329,589	15,755,070	3,537,802	21,622,461	883,405	22,505,866
Missouri	59	1,657	341	326	2,324	939	3,263	417,633	46,509	79,757	543,899	237,232	781,131	3,341,065	394,603	638,046	4,373,714	1,897,866	6,271,580
Montana	62	4,425	147	1,223	5,795	275	6,070	1,311,796	36,664	375,481	1,723,941	93,337	1,817,278	10,085,135	291,052	3,006,131	13,382,318	746,855	14,129,173
Nevada	192	1,134	1,558	250	2,942	122	3,064	301,006	432,196	63,690	796,892	33,695	830,587	2,405,692	3,461,519	509,234	6,376,445	269,909	6,646,354
New Jersey	16	653	35	175	863	58	921	152,979	6,019	42,268	201,266	14,548	215,814	1,223,836	48,254	338,147	1,610,237	116,384	1,726,621
New Mexico	79	1,594	1,168	351	3,113	137	3,250	517,037	313,146	112,901	973,084	39,249	1,012,333	4,136,701	2,742,097	903,245	7,782,043	313,920	8,095,963
New York	22	1,380	338	221	1,939	202	2,141	374,446	107,042	58,421	539,909	52,109	592,018	3,044,416	856,330	474,547	4,375,293	413,994	4,789,287
North Carolina	144	638	445	109	1,192	72	1,264	165,430	91,710	25,904	283,044	18,017	301,061	1,323,249	745,407	207,375	2,276,031	145,269	2,421,300
Ohio	42	384	127	46	557	-------	557	95,184	29,997	11,110	136,291	-------	136,291	766,867	247,491	89,024	1,103,382	-------	1,103,382
Oklahoma	27	714	80	64	858	10	868	123,420	20,459	19,763	163,642	3,060	166,702	987,368	166,315	158,100	1,311,783	24,480	1,336,263
Oregon	26	26	46	8	80	5	85	4,877	7,685	991	13,553	1,250	14,803	38,776	61,462	7,928	108,166	10,000	118,166
Pennsylvania	41	701	111	193	1,005	96	1,101	167,313	22,134	47,190	236,637	19,963	256,600	1,343,477	170,685	377,964	1,892,126	182,577	2,074,703
South Carolina	22	2	218	-------	220	38	258	10	48,688	-------	48,698	9,350	58,048	80	397,433	-------	397,513	68,455	465,968
South Dakota	28	990	106	111	1,207	18	1,225	303,188	24,045	34,219	361,452	5,129	366,581	2,425,509	197,124	273,752	2,896,385	39,732	2,936,117
Tennessee	43	753	373	189	1,315	41	1,356	182,888	74,032	46,127	303,047	10,786	313,833	1,463,107	594,355	369,010	2,426,472	86,506	2,512,978
Texas	34	34	263	975	1,272	96	1,368	9,949	61,952	346,715	418,616	25,654	444,270	79,590	503,905	2,774,248	3,357,743	205,869	3,563,612
Utah	142	1,650	2,730	427	4,807	158	4,965	444,858	820,767	116,706	1,382,331	46,665	1,428,996	3,562,197	6,565,763	934,290	11,062,250	370,505	11,432,755
Vermont	6	151	123	42	316	21	337	45,956	31,880	13,112	90,948	5,542	96,490	372,849	256,323	109,314	738,486	46,092	784,578
Virginia	13	535	137	54	726	103	829	141,596	35,305	12,880	189,781	21,797	211,578	1,132,772	325,675	103,040	1,561,487	209,490	1,770,977
Washington	25	360	133	75	568	24	592	104,048	32,459	20,766	157,273	6,610	163,883	832,336	263,688	166,139	1,262,163	52,883	1,315,046
West Virginia	3	61	8	17	86	-------	86	17,998	1,552	5,156	24,706	-------	24,706	143,984	11,791	41,248	197,023	-------	197,023
Wisconsin	16	1,050	32	269	1,351	22	1,373	257,479	4,797	65,333	327,609	5,594	333,203	2,059,834	38,397	522,677	2,620,908	44,752	2,665,660
Wyoming	48	317	191	91	599	115	714	83,385	33,668	24,800	141,853	29,481	171,334	667,084	292,808	200,126	1,160,018	235,898	1,395,916
Other States [1]	28	26	109	3	138	14	152	8,875	23,427	1,035	33,337	3,909	37,246	71,250	198,242	8,280	277,772	31,268	309,040
Total	**2,653**	**40,281**	**24,663**	**14,703**	**79,647**	**4,961**	**84,608**	**10,629,884**	**6,329,348**	**3,989,555**	**20,948,787**	**1,333,710**	**22,282,497**	**84,726,242**	**50,978,425**	**32,338,188**	**168,042,855**	**10,789,967**	**178,832,822**

State	Average hours worked per man per day						Average days active						Average hours worked per man per year					
	Under-ground	Open-cut	Surface	Total	Office workers	Grand total	Under-ground	Open-cut	Surface	Total	Office workers	Grand total	Under-ground	Open-cut	Surface	Total	Office workers	Grand total
Alabama	8.00	9.18	8.09	8.14	8.22	8.14	224	224	223	224	235	224	1,791	2,052	1,806	1,820	1,929	1,821
Alaska	8.25	9.40	8.62	8.61	9.06	8.63	174	60	218	211	286	213	1,434	566	1,876	1,817	2,586	1,840
Arizona	8.00	7.94	8.94	8.08	8.00	8.07	300	312	264	300	298	300	2,403	2,473	2,364	2,426	2,383	2,424
Arkansas	8.00	8.11	8.00	8.03	8.20	8.05	329	224	322	289	256	285	2,630	1,814	2,576	2,318	2,098	2,293
California	8.01	8.20	8.01	8.06	7.93	8.04	238	195	261	228	269	233	1,905	1,601	2,091	1,838	2,129	1,871
Colorado	8.00	7.95	8.00	8.00	7.99	8.00	264	195	266	261	302	266	2,116	1,547	2,126	2,087	2,414	2,127
Florida	--------	8.20	--------	8.20	8.04	8.19	--------	259	--------	259	259	259	--------	2,122	--------	2,122	2,080	2,119
Georgia	9.10	8.42	8.73	8.46	7.73	8.30	228	254	237	252	285	258	2,077	2,135	2,071	2,131	2,204	2,145
Idaho	8.00	8.03	8.04	8.01	10.28	8.09	254	83	238	234	203	232	2,032	664	1,913	1,871	2,084	1,880
Illinois	8.00	8.00	8.00	8.00	8.00	8.00	269	292	285	274	265	273	2,155	2,335	2,281	2,195	2,118	2,185
Indiana	8.00	8.00	8.00	8.00	--------	8.00	80	282	80	155	--------	155	643	2,253	640	1,239	--------	1,239
Iowa	--------	8.06	--------	8.06	--------	8.06	--------	273	--------	273	--------	273	--------	2,197	--------	2,197	--------	2,197
Kansas	8.00	8.00	8.00	8.00	8.00	8.00	281	291	274	281	276	281	2,251	2,328	2,196	2,248	2,207	2,247
Kentucky	7.98	7.95	8.14	7.99	8.37	8.01	212	145	169	180	272	185	1,691	1,152	1,374	1,441	2,273	1,479
Louisiana	8.68	8.00	8.01	8.05	8.00	8.05	275	122	357	345	280	345	2,385	974	2,858	2,780	2,236	2,775
Maryland	8.00	7.91	8.00	7.97	8.00	7.98	228	162	257	203	260	219	1,825	1,282	2,056	1,622	2,080	1,744
Michigan	8.00	8.01	8.00	8.00	8.01	8.00	244	183	244	242	253	242	1,954	1,464	1,951	1,935	2,030	1,936
Minnesota	8.00	8.00	8.00	8.00	7.99	8.00	244	252	260	252	261	252	1,953	2,012	2,079	2,016	2,084	2,019
Missouri	8.00	8.48	8.00	8.04	8.00	8.03	252	136	245	234	253	239	2,016	1,157	1,957	1,882	2,021	1,922
Montana	7.69	7.94	8.00	7.76	8.00	7.77	296	249	307	297	339	299	2,279	1,980	2,458	2,309	2,716	2,328
Nevada	7.99	8.01	8.00	8.00	8.01	8.00	265	277	255	271	276	271	2,121	2,222	2,037	2,167	2,212	2,169
New Jersey	8.00	8.02	8.00	8.00	8.00	8.00	234	172	242	233	251	234	1,874	1,379	1,932	1,866	2,007	1,875
New Mexico	8.00	7.99	8.00	8.00	8.00	8.00	324	294	322	313	286	311	2,595	2,348	2,573	2,500	2,291	2,491
New York	8.13	8.00	8.12	8.10	7.94	8.09	271	317	264	278	258	277	2,206	2,534	2,147	2,256	2,049	2,237
North Carolina	8.00	8.13	8.01	8.04	8.06	8.04	259	206	238	237	250	238	2,074	1,675	1,903	1,909	2,018	1,916
Ohio	8.06	8.25	8.01	8.10	--------	8.10	248	236	242	245	--------	245	1,997	1,949	1,935	1,981	--------	1,981
Oklahoma	8.00	8.13	8.00	8.02	8.00	8.02	173	256	309	191	306	192	1,383	2,079	2,470	1,529	2,448	1,539
Oregon	7.95	8.00	8.00	7.98	8.00	7.98	188	167	124	169	250	174	1,491	1,336	991	1,352	2,000	1,390
Pennsylvania	8.03	7.71	8.01	8.00	9.15	8.41	239	199	245	235	208	233	1,917	1,538	1,958	1,883	1,902	1,884
South Carolina	8.00	8.16	--------	8.16	7.32	8.03	5	223	--------	221	246	225	40	1,823	--------	1,807	1,801	1,806
South Dakota	8.00	8.20	8.00	8.01	7.75	8.01	306	227	308	299	285	299	2,450	1,860	2,466	2,400	2,207	2,397
Tennessee	8.00	8.03	8.00	8.01	8.02	8.01	243	198	244	230	263	231	1,943	1,593	1,952	1,845	2,110	1,853
Texas	8.00	8.13	8.00	8.02	8.02	8.02	293	236	356	329	267	325	2,341	1,916	2,845	2,640	2,144	2,605
Utah	8.01	8.00	8.01	8.00	7.94	8.00	270	301	273	288	295	288	2,159	2,405	2,188	2,301	2,345	2,303
Vermont	8.11	8.04	8.34	8.12	8.32	8.13	304	259	312	288	264	286	2,469	2,084	2,603	2,337	2,195	2,328
Virginia	8.00	9.22	8.00	8.23	9.61	8.37	265	258	239	261	212	255	2,117	2,377	1,908	2,151	2,034	2,136
Washington	8.00	8.12	8.00	8.03	8.00	8.02	289	244	277	277	275	277	2,312	1,983	2,215	2,222	2,203	2,221
West Virginia	8.00	7.60	8.00	7.97	--------	7.97	295	194	303	287	--------	287	2,360	1,474	2,426	2,291	--------	2,291
Wisconsin	8.00	8.00	8.00	8.00	8.00	8.00	245	150	243	242	254	243	1,962	1,200	1,943	1,940	2,034	1,941
Wyoming	8.00	8.70	8.07	8.18	8.00	8.15	263	176	273	237	256	240	2,104	1,533	2,199	1,937	2,051	1,955
Other States [1]	8.03	8.46	8.00	8.33	8.00	8.30	341	215	345	242	279	245	2,740	1,819	2,760	2,013	2,233	2,033
Total	7.97	8.05	8.11	8.02	8.09	8.03	264	257	271	263	269	263	2,103	2,067	2,199	2,110	2,175	2,114

See footnote at end of table, p.22.

TABLE 11.—*Active metal and nonmetal mines, men working, man-days and man-hours worked, and injuries and injury-frequency rates at metal and nonmetal mines in the United States and Alaska, by location and State, 1955*—Continued

State	Injuries												Injury-frequency rates per million man-hours											
	Fatal						Nonfatal						Fatal						Nonfatal					
	Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total
Alabama	2		2	4		4	43	6	3	52		52	0.49		2.37	0.71		0.70	10.48	9.28	3.55	9.29		9.14
Alaska			1	1		1	5		131	136		136			.52	.49		.47	64.58		67.47	66.76		63.92
Arizona	6	2	3	11		11	711	144	59	914		914	.67	.26	1.32	.58		.56	79.37	18.85	25.95	48.43		46.50
Arkansas	1			1		1	72	23	1	96		96	1.20			.70		.62	86.09	54.89	5.71	67.11		59.90
California	2			2		2	323	50	38	411	4	415	.67			.34		.29	107.58	29.13	31.34	69.29	4.53	60.89
Colorado	5	1	1	7		7	388	14	61	463		463	.97	3.97	.95	1.08		.93	74.89	55.52	57.86	71.37		61.66
Florida		1		1		1		17		17		17		.33		.33		.30		5.57		5.57		5.11
Georgia							8	35	1	44		44							116.72	31.05	43.91	36.10		28.85
Idaho	6			6		6	679	8	48	735		735	1.18			.85		.81	134.04	33.20	27.58	104.30		99.70
Illinois	1			1		1	39	2	1	42		42	1.75			1.26		1.11	68.29	19.92	8.43	53.15		46.76
Indiana								1		1		1								22.19		14.94		14.94
Iowa								5		5		5								12.30		12.30		12.30
Kansas	1			1		1	36			36		36	1.38			1.17		1.15	49.67			42.15		41.50
Kentucky	1			1		1	19	8		27		27	2.84			1.60		1.49	54.01	41.59		43.19		40.12
Louisiana			1	1		1	3	1	42	46		46			.32	.30		.29	11.98	42.78	13.51	13.60		13.50
Maryland							5		1	6		6							85.62		162.13	63.79		43.56
Michigan	4	1		5		5	364	8	33	405		405	.34	2.24		.31		.31	31.33	17.92	8.44	25.35		25.02
Minnesota	1	2		3		3	29	139	27	195		195	.43	.13		.14		.13	12.45	8.82	7.63	9.02		8.66
Missouri	1	2		3		3	156	8	1	165	1	166	.30	5.07		.69		.48	46.69	20.27	1.57	37.73	.53	26.47
Montana	17			17		17	491	21	34	546		546	1.69			1.27		1.20	48.69	72.15	11.31	40.80		38.64
Nevada	3	2		5		5	371	137	57	565	3	568	1.25	.58		.78		.75	154.22	39.58	111.93	88.61	11.11	85.46
New Jersey							86	3	13	102		102							70.27	62.17	38.44	63.34		59.07
New Mexico	1			1		1	372	53	27	452		452	.24			.13		.12	89.93	19.33	29.89	58.08		55.83
New York		3		3		3	113	12	7	132		132		3.50		.69		.63	37.12	14.01	14.75	30.17		27.56
North Carolina		1		1		1	91	26	11	128		128		1.34		.44		.41	68.77	34.88	53.04	56.24		52.86
Ohio	2			2		2	48	3		51		51	2.61			1.81		1.81	62.59	12.12		46.22		46.22
Oklahoma	1	1		2		2	29	3	1	33		33	1.01	6.01		1.52		1.50	29.37	18.04	6.33	25.16		24.70
Oregon							12	6	1	19		19							309.47	97.62	126.14	175.66		160.79
Pennsylvania	2	1		3		3	21	20	1	42		42	1.49	5.86		1.59		1.45	15.63	117.17	2.65	22.20		20.24
South Carolina								6		6		6								15.10		15.09		12.88
South Dakota	5			5		5	141	15	28	184		184	2.06			1.73		1.70	58.13	76.09	102.28	63.53		62.67
Tennessee							31	11	3	45		45							21.19	18.51	8.13	18.55		17.91
Texas	1		1	2		2	5	18	78	101		101	12.56		.36	.60		.56	62.82	35.72	28.12	30.08		28.34
Utah	3	1		4		4	258	42	39	339		339	.84	.15		.36		.35	72.43	6.40	41.74	30.64		29.65
Vermont							16	11	1	28		28							42.91	42.91	9.15	37.92		35.69
Virginia	2			2		2	52	19		71		71	1.77			1.28		1.13	45.91	58.34		45.47		40.09
Washington	2			2		2	129	13	10	152		152	2.40			1.58		1.58	154.99	49.30	60.19	120.43		115.59
West Virginia							6			6		6							41.67			30.45		30.45
Wisconsin							123		9	132		132							59.71		17.22	50.36		49.52
Wyoming	1			1		1	32	10	6	48		48	1.50			.86		.72	47.97	34.15	29.98	41.38		34.39
Other States [1]							4	11		15		15							56.14	55.49		54.00		48.54
Total	71	18	9	98		98	5,311	909	773	6,993	8	7,001	.84	.35	.28	.58		.55	62.68	17.83	23.90	41.61	.74	39.15

[1] Includes Connecticut, Maine, Mississippi, Nebraska, New Hampshire, and North Dakota.

TABLE 12.—*All mines: Injuries in the United States and Alaska, by State and severity of injury, 1955*

State	Fatalities	Permanent total [1]	Permanent partial [2]	Temporary total [3]	Total nonfatal injuries	Total all injuries	Office workers	Grand total
Alabama	4	--------	13	39	52	56	--------	56
Alaska	1	2	1	133	136	137	--------	137
Arizona	11	4	58	852	914	925	--------	925
Arkansas	1	--------	5	91	96	97	--------	97
California	2	--------	8	403	411	413	4	417
Colorado	7	--------	19	444	463	470	--------	470
Florida	1	--------	1	16	17	18	--------	18
Georgia	--------	--------	--------	44	44	44	--------	44
Idaho	6	--------	25	710	735	741	--------	741
Illinois	1	--------	2	40	42	43	--------	43
Indiana	--------	--------	--------	1	1	1	--------	1
Iowa	--------	--------	--------	5	5	5	--------	5
Kansas	1	--------	9	27	36	37	--------	37
Kentucky	1	--------	--------	27	27	28	--------	28
Louisiana	1	--------	2	44	46	47	--------	47
Maryland	--------	1	--------	5	6	6	--------	6
Michigan	5	--------	11	394	405	410	--------	410
Minnesota	3	--------	22	173	195	198	--------	198
Missouri	3	--------	21	144	165	168	1	169
Montana	17	1	18	527	546	563	--------	563
Nevada	5	--------	17	548	565	570	3	573
New Jersey	--------	1	25	76	102	102	--------	102
New Mexico	1	--------	11	441	452	453	--------	453
New York	3	1	5	126	132	135	--------	135
North Carolina	1	--------	9	119	128	129	--------	129
Ohio	2	--------	--------	51	51	53	--------	53
Oklahoma	2	--------	8	25	33	35	--------	35
Oregon	--------	--------	1	18	19	19	--------	19
Pennsylvania	3	--------	2	40	42	45	--------	45
South Carolina	--------	--------	--------	6	6	6	--------	6
South Dakota	5	--------	3	181	184	189	--------	189
Tennessee	--------	--------	--------	45	45	45	--------	45
Texas	2	--------	11	90	101	103	--------	103
Utah	4	1	13	325	339	343	--------	343
Vermont	--------	--------	2	26	28	28	--------	28
Virginia	2	--------	6	65	71	73	--------	73
Washington	2	--------	3	149	152	154	--------	154
West Virginia	--------	--------	--------	6	6	6	--------	6
Wisconsin	--------	--------	1	131	132	132	--------	132
Wyoming	1	--------	1	47	48	49	--------	49
Other States [4]	--------	--------	--------	15	15	15	--------	15
Total: 1955	98	11	333	6,649	6,993	7,091	8	7,099
1954	95	11	282	5,657	5,950	6,045	--------	6,045

[1] *Permanent total disability.*—Loss or loss of use of both hands, arms, legs, or feet, or both eyes, or any two thereof; or any injury (except death) that permanently and totally incapacitates injured person from following any gainful occupation.

[2] *Permanent partial disability.*—Loss or loss of use of 1 foot, leg, hand, arm, or eye; or loss of part of bone of 1 of foregoing; or loss or loss of use of 1 or more fingers, 1 great toe, or any 2 or more toes; or permanent impairment of use of any part of body.

[3] *Temporary.*—Disability for more than remainder of day of accident.

[4] Includes Connecticut, Maine, Mississippi, Nebraska, New Hampshire and North Dakota.

TABLE 13.—*Injuries at all metal and nonmetal mines in the United States and Alaska, by location, agency, and State, 1955*[1]

UNDERGROUND

State	Fall of rock or or from roof or wall		Handling rock or ore while loading at working face		Handtools		Explosives		Haulage		Falling down chute, winze, raise, or stope		Other falls of persons		Run of ore from chute or pocket		Drilling	
	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries
Alabama	2	9		3		3				6				3				5
Alaska												1						1
Arizona	1	97		83		38		3		94		16		30		25		26
Arkansas		15		3		5				4		2		3		1		2
California		55		31		16		3		21	1	6		29		12		23
Colorado	1	55		34		19		7	1	69	1	8		34		13		22
Florida																		
Georgia		2		2								1						
Idaho	2	127		42		61		2	1	79	2	33		45		7		65
Illinois		6		7		1				1				3				5
Indiana																		
Iowa																		
Kansas	1	3		1		6						2		7		1		3
Kentucky	1	6		5		3				3		1						
Louisiana								1				1						
Maryland				3						1								
Michigan		57		15		12	3	12		27		16		39		34		33
Minnesota	1	9		2						1		1		5		2		
Missouri		20		6		19	1	2		33				26				19
Montana	6	127	1	67		39		4	4	54	3	9		48	1	3		5
Nevada		64		48		29	1	2	2	44		5		32		6		46
New Jersey		7		4		10				19		1		4		11		12
New Mexico		26		44		24				37		12		22		10		32
New York		12		10		2		2		16		2		2		8		11
North Carolina		11		12		9				6		1		7		2		8
Ohio	1	9		8		3		1	1	7		1						
Oklahoma	1	8		6						3		2		1		2		6
Oregon		3		4										1				
Pennsylvania		3		4	1	1				2		1	1	4				
South Carolina																		
South Dakota	1	12		8		7		2	3	23	1	3		19		5		12
Tennessee		4				3				1		2		1		2		4
Texas		2		1				1		1								
Utah	2	60		11		5		2		27		11		23		7		38
Vermont		1		2						4		1						3
Virginia				6		1				13	1	1				11		9
Washington	1	24		20		6				17		4		10		2		10
West Virginia		1		3						1								
Wisconsin		26		2		6		1		10		3		20		3		9
Wyoming		3		1		1				5				3		5		5
Other States[2]		2		1														
Total: 1955	21	866	1	499	1	329	5	45	12	629	9	147	1	421	1	172		414
1954	21	754	3	325	1	273	4	44	9	520	6	136		315	7	191		474
Change, 1955 percent	0.0	+14.9	−66.7	+53.5	0.0	+20.5	+25.0	+2.3	+33.3	+21.0	+50.0	+8.1	+100.0	+33.7	−85.7	−9.9		−12.7

State	Electricity		Machinery (other than locomotives or drills)		Mine fires		Suffocation from natural gases		Inrush of water		Stepping on nail		Handling materials (other than rock or ore) and equipment		Other causes		Total underground	
	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries
Alabama		2		5										7		2	2	45
Alaska				1										1		1		5
Arizona		3		34		5		1				14		120		91	1	680
Arkansas	1	2		3										13		19	1	72
California		1	1	25		1		1				6		25		67	2	322
Colorado		3		40			2	2				6		41		38	5	391
Florida																		
Georgia				1										2				8
Idaho				15					1	2		7		99		95	6	679
Illinois				5								1		8	1	3	1	40
Indiana																		
Iowa																		
Kansas				4								1		3		4	1	35
Kentucky				2													1	20
Louisiana														1				3
Maryland																1		5
Michigan		1		17		1						4		49		39	3	356
Minnesota				2										4		3	1	29
Missouri		4		4										14		7	1	154
Montana			1	45								5		87	1	14	17	507
Nevada				22								2		31		31	3	362
New Jersey		1										1		11		4		85
New Mexico		6		38								2		54		56		363
New York		1		4										19		21		110
North Carolina				5								3		12		13		89
Ohio														10		11	2	50
Oklahoma				1												1	1	30
Oregon				1										1		2		12
Pennsylvania				1										8		4	2	23
South Carolina																		
South Dakota				9								8		15		22	5	145
Tennessee				5										4		5		31
Texas																		5
Utah				21			1	3				1		29		16	3	254
Vermont														3		2		16
Virginia				1										8		3	1	53
Washington				4				1				2		23		4	1	127
West Virginia														1				6
Wisconsin		2		10								2		13		12		119
Wyoming		1		1										5		2		32
Other States [3]				1														4
Total: 1955	1	27	2	327		7	3	8	1	2		65		716	2	593	60	5,267
1954	1	31	1	256		2	2	9				49	1	632	7	604	63	4,615
Change, 1955 percent	0.0	−12.9	+100.0	+27.7		+250.0	+50.0	−11.1	+100.0	+100.0		+32.7	−100.0	+13.3	−71.4	−1.8	−5.0	+14.1

See footnotes at end of table, p. 29.

TABLE 13.—*Injuries at all metal and nonmetal mines in the United States and Alaska, by location, agency, and States, 1955* [1]—Continued

SHAFT

State	Falling down shaft		Object falling down shaft		Breaking of cables		Overwinding		Cage, skip, or bucket		Other causes		Total shaft		Total underground and shaft	
	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries
Alabama															2	45
Alaska																5
Arizona	2	3	2	9					1	13		12	5	37	6	717
Arkansas										1				1	1	73
California				1						1		1		3	2	325
Colorado										2				2	5	393
Florida																
Georgia																8
Idaho										5		1		6	6	685
Illinois															1	40
Indiana																
Iowa																
Knasas										2				2	1	37
Kentucky															1	20
Louisiana																3
Maryland																5
Michigan		2		1					1	6		3	1	12	4	368
Minnesota				1										1	1	30
Missouri												3		3	1	157
Montana				1										1	17	508
Nevada										2		10		12	3	374
New Jersey				1										1		86
New Mexico		1	1	6						1		2	1	10	1	373
New York		1		1								1		3		113
North Carolina				1						1				2		91
Ohio															2	50
Oklahoma															1	30
Oregon																12
Pennsylvania															2	23
South Carolina																
South Dakota										1				1	5	146
Tennessee																81
Texas	1	1											1	1	1	6
Utah		1		1						3		2		7	3	261
Vermont																16
Virginia	1	1											1	1	2	54
Washington	1	1		1						2			1	4	2	131
West Virginia																6
Wisconsin		1		2								1		4		128
Wyoming									1	1			1	1	1	33
Other States [2]																4
Total: 1955	5	12	3	26					3	41		36	11	115	71	5,382
1954	4	9		18		1		1	5	35		21	9	85	72	4,700
Change, 1955 ... percent	+25.0	+33.3	+100.0	+44.4		−100.0		−100.0	−40.0	+17.1		+71.4	+22.2	+35.3	−1.4	+14.5

SURFACE

State	Mine cars, mine locomotives or aerial trams		Railway cars and locomotives		Run or fall of ore in or from ore bins		Falls of persons		Stepping on nails		Handtools		Electricity		Machinery (including placer dredging)		Handling materials		Other causes		Total surface		Total underground, shaft, and surface	
	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries
Alabama						1							1	1				1	1	2	2	5	4	50
Alaska								16		1		20				4		44	1	47	1	132	1	137
Arizona	1	6					1	7		1		4				9	1	30		5	3	62	9	779
Arkansas																		1				1	1	74
California		2		1				5		1		2				4		15		8		38	2	363
Colorado		9				2		5				4		1		8		21	1	12	1	62	6	455
Florida																								
Georgia												1										1		9
Idaho		3						8		2		5		2		5		16		7		48	6	733
Illinois												1										1	1	41
Indiana																								
Iowa																								
Kansas																							1	37
Kentucky																							1	20
Louisiana								8				5						20	1	10	1	43	1	46
Maryland		1																				1		6
Michigan		3		3		3		7				4				2		7		4		33	4	401
Minnesota		1						6				2						9		9		27	1	57
Missouri				1																		1	1	158
Montana		3		1		1		4				3				4		13		5		34	17	542
Nevada		4		1		2		4				9				6		22		9		57	3	431
New Jersey				1				4				1				2		5				13		99
New Mexico		3				1		1				1		1		4		7		9		27	1	400
New York				2				3				1						1				7		120
North Carolina		1						1				1				1		5		2		11		102
Ohio																							2	50
Oklahoma																		1				1	1	31
Oregon												1										1		13
Pennsylvania																1						1	2	24
South Carolina																								
South Dakota								6		1		6				5		3		7		28	5	174
Tennessee				1						1								1				3		34
Texas								6				1	1	1		16		18		37	1	79	2	85
Utah		1				2		2		1		5				3		17		8		39	3	300
Vermont																		1				1		17
Virginia																							2	54
Washington										1				1		2		5		1		10	2	141
West Virginia																								6
Wisconsin								3				1				1				4		9		132
Wyoming				2				1										3				6	1	39
Other States [2]																								4
Total 1955	1	37		13		12	1	97		9		78	2	7		77	1	266	4	186	9	782	80	6,164
1954		13	1	5		14		94		5		50		8		105	1	177		195	2	666	74	5,366
Change, 1955 percent	+100.0	+184.6	−100.0	+160.0		−14.3	+100.0	+3.2		+80.0		+56.0	+100.0	−13.0		−27.0	0.0	+50.3	+100.0	−4.6	+350.0	+17.4	+8.1	+14.9

See footnotes at end of table, p. 29.

TABLE 13.—*Injuries at all metal and nonmetal mines in the United States and Alaska, by location, agency, and States, 1955* [1]—Continued

OPENCUT

State	Falls or slides of rock or ore		Explosives		Haulage		Power shovels		Falls of persons		Falls of derricks, booms, etc.		Run or fall of ore, in or from ore bins		Machinery (other than locomotives or power shovels)	
	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries
Alabama						1				1						1
Alaska																
Arizona	1	14			1	3		5		19						16
Arkansas						5		1		4						2
California		3		1				2		8						11
Colorado	1	3				2										6
Florida										6						2
Georgia		2				6				5						11
Idaho						1				1				1		
Illinois										1						
Indiana																1
Iowa										2						
Kansas																
Kentucky								1								2
Louisiana																
Maryland																
Michigan										3					1	2
Minnesota		7			2	16		10		30				4		15
Missouri		1				2							1	1		2
Montana		5		1		2		2		3				1		
Nevada	1	10		1	1	5		8		17						12
New Jersey																
New Mexico		2				10		1		4						8
New York	1	2	1	2			1	1		3						
North Carolina		6						3		2				1	1	3
Ohio								1								1
Oklahoma	1	2														1
Oregon				1				1								
Pennsylvania				1			1	1		7				2		1
South Carolina																1
South Dakota		9												1		2
Tennessee		3						1		2						1
Texas		1						1		4						5
Utah	1	6		3		4		2		9						2
Vermont				2		1				2						4
Virginia		4				1		1		3						2
Washington		1						1		1						1
West Virginia																
Wisconsin																
Wyoming		1		1				1		2						1
Other States [2]																
Total: 1955	6	82	1	13	4	59	2	44		139			1	11	2	116
1954	3	39	5	12	4	68	1	44	1	100		5		4	5	93
Change, 1955 ... percent	+100.0	+110.3	−80.0	+8.3	0.0	−13.2	+100.0	0.0	−100.0	+39.0		−100.0	+100.0	+175.0	−60.0	+25.0

State	Electricity		Hand tools		Handling materials		Other causes		Total open cut		Total underground, shaft, surface, and open cut		Total office workers		Grand total	
	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries	Fatal	All injuries[1]
Alabama				1				2		6	4	56			4	56
Alaska											1	137			1	137
Arizona		1		11		43		34	2	146	11	925			11	925
Arkansas				3		3		5		23	1	97			1	97
California				2		10		13		50	2	413		4	2	417
Colorado				1		1		2	1	15	7	470			7	470
Florida				3		4	1	3	1	18	1	18			1	18
Georgia		1		5		3		2		35		44				44
Idaho						4		1		8	6	741			6	741
Illinois								1		2	1	43			1	43
Indiana										1		1				1
Iowa				1		2				5		5				5
Kansas											1	37			1	37
Kentucky				1		1		3		8	1	28			1	28
Louisiana						1				1	1	47			1	47
Maryland												6				6
Michigan				2				2	1	9	5	410			5	410
Minnesota				8		33		18	2	141	3	198			3	198
Missouri						3	1	1	2	10	3	168		1	3	169
Montana				3		1		3		21	17	563			17	563
Nevada		2		11		33		40	2	139	5	570		3	5	573
New Jersey				1				2		3		102				102
New Mexico				8		8		12		53	1	453			1	453
New York				3				4	3	15	3	135			3	135
North Carolina				2		7		3	1	27	1	129			1	129
Ohio						1				3	2	53			2	53
Oklahoma								1	1	4	2	35			2	35
Oregon						1		3		6		19				19
Pennsylvania				2		1		6	1	21	3	45			3	45
South Carolina						3		2		6		6				6
South Dakota								3		15	5	189			5	189
Tennessee						1		3		11		45				45
Texas						6		1		18	2	103			2	103
Utah				4		8		5	1	43	4	343			4	343
Vermont						1		1		11		28				28
Virginia				2		4		2		19	2	73			2	73
Washington						7		2		13	2	154			2	154
West Virginia												6				6
Wisconsin												132				132
Wyoming				1				3		10	1	49			1	49
Other States[2]						9		2		11		15				15
Total: 1955		4		75		199	2	185	18	927	98	7,091		8	98	7,099
1954	1	15		69		114	1	116	21	679	95	6,045			95	6,045
Change, 1955 percent	−100.0	−73.3		+9.0		+75.0	+100.0	+59.5	−14.3	+36.5	+3.2	+17.3		+100.0	+3.2	+17.4

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[1] Nonfatal injuries may be determined by subtracting fatal injuries from all injuries.
[2] Includes Connecticut, Maine, Mississippi, Nebraska, New Hampshire, and North Dakota.

TABLE 14.—*Employment data and injury experience at copper mines, by States, 1955*

State	Active mines	Men employed						Average days active					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Arizona	50	2,903	740	2,962	6,605	289	6,894	307	262	317	307	301	306
Idaho	6	164	86	1	251	22	273	287	293	30	288	265	286
Michigan	10	971	219	--------	1,190	13	1,203	242	236	--------	241	262	241
Nevada	21	170	1	1,165	1,336	36	1,372	271	101	294	291	282	291
New Mexico	10	109	27	940	1,076	4	1,080	296	339	310	309	365	309
Utah	7	21	3	2,209	2,233	72	2,305	270	300	316	315	317	316
Other States [1]	36	3,149	1,148	12	4,309	60	4,369	295	304	309	297	335	298
Total	140	7,487	2,224	7,289	17,000	496	17,496	292	283	312	299	304	300

State	Active mines	Man-days worked						Man-hours worked					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Arizona	50	892,669	194,125	938,669	2,025,463	87,120	2,112,583	7,141,179	1,792,937	7,448,834	16,382,950	696,959	17,079,909
Idaho	6	46,994	25,223	30	72,247	5,833	78,080	375,948	201,784	240	577,972	46,664	624,636
Michigan	10	235,026	51,755	--------	286,781	3,400	290,181	1,880,208	414,032	--------	2,294,240	27,202	2,321,442
Nevada	21	46,095	101	342,820	389,016	10,169	399,185	368,100	808	2,742,589	3,111,497	81,352	3,192,849
New Mexico	10	32,231	9,159	291,141	332,531	1,459	333,990	257,847	73,274	2,329,133	2,660,254	11,672	2,671,926
Utah	7	5,668	901	697,880	704,449	22,847	727,296	45,344	7,208	5,583,040	5,635,592	182,776	5,818,368
Other States [1]	36	928,435	348,645	3,708	1,280,788	20,079	1,300,867	7,018,576	2,789,147	29,664	9,837,387	160,632	9,998,019
Total	140	2,187,118	629,909	2,274,248	5,091,275	150,907	5,242,182	17,087,202	5,279,190	18,133,500	40,499,892	1,207,257	41,707,149

State	Active mines	Injuries											
		Fatal						Nonfatal					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Arizona	50	6	2	1	9	--------	9	527	42	140	709	--------	709
Idaho	6	--------	--------	--------	--------	--------	--------	32	5	--------	37	--------	37
Michigan	10	1	--------	--------	1	--------	1	104	9	--------	113	--------	113
Nevada	21	1	--------	2	3	--------	3	12	--------	91	103	2	105
New Mexico	10	1	--------	--------	1	--------	1	56	3	31	90	--------	90
Utah	7	--------	--------	1	1	--------	1	5	--------	25	30	--------	30
Other States [1]	36	11	--------	--------	11	--------	11	373	26	1	400	--------	400
Total	140	20	2	4	26	--------	26	1,109	85	288	1,482	2	1,484

[1] Includes California, Colorado, Montana, North Carolina, Tennessee, Vermont, and Washington.

TABLE 15.—*Employment data and injury experience at iron mines, by States, 1955*

State	Active mines	Men employed						Average days active					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Alabama	20	2,271	462	254	2,987	39	3,026	224	224	225	224	241	224
Michigan	37	4,719	1,697	261	6,677	90	6,767	242	243	162	239	252	239
Minnesota	120	1,193	1,702	7,814	10,709	424	11,133	244	260	251	252	261	252
Missouri	4	49	54	15	118	6	124	224	222	207	221	217	221
Nevada	4	--------	--------	69	69	--------	69	--------	--------	106	106	--------	106
New Jersey	5	517	142	7	666	16	682	230	240	82	231	253	231
New York	5	489	123	309	921	145	1,066	250	251	322	275	254	272
Texas	4	--------	62	112	174	7	181	--------	222	229	227	261	228
Utah	6	--------	--------	408	408	19	427	--------	--------	243	243	246	243
Wisconsin	3	927	218	28	1,173	17	1,190	245	242	160	242	255	242
Other States [1]	8	646	200	206	1,052	30	1,082	259	262	299	267	250	267
Total	216	10,811	4,660	9,483	24,954	793	25,747	239	247	249	245	256	245

State	Active mines	Man-days worked						Man-hours worked					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Alabama	20	507.949	103,610	57,233	668,792	9,387	678,179	4,063,593	838,121	538.017	5,439,731	77,837	5,517,568
Michigan	37	1,140.858	411,562	42,194	1,594,614	22,706	1,617.320	9,126,897	3,292,490	337,560	12,756,947	181,892	12,938.839
Minnesota	120	291,198	442,228	1,965,167	2,698,593	110,586	2,809,179	2,329,589	3,537,802	15,720.278	21,587,669	883,405	22,471.074
Missouri	4	10,994	11,966	3,110	26,070	1,300	27,370	87,953	95,726	24,880	208,559	10,400	218,959
Nevada	4	--------	--------	7,299	7,299	--------	7,299	--------	--------	58,392	58,392	--------	58,392
New Jersey	5	118,973	34,012	575	153,560	4,048	157,608	951,788	272,099	4.600	1,228,487	32,384	1,260,871
New York	5	122,350	30,909	99.557	252,816	36,845	289,661	978.798	247,272	796,454	2,022,524	292,765	2,315,289
Texas	4	--------	13,780	25.694	39,474	1,826	41,300	--------	110,240	207,318	317,558	15,336	332,894
Utah	6	--------	--------	98,964	98,964	4,677	103,641	--------	--------	791,710	791,710	37,005	828,715
Wisconsin	3	226.828	52,747	4,472	284,047	4,327	288,374	1,814.627	421,978	35,777	2,272,382	34,618	2,307,000
Other States [1]	8	167,185	52,347	61,631	281,163	7,492	288,655	1,341,001	421,562	494,149	2,256,712	58,795	2,315,507
Total	216	2,586,335	1,153,161	2,365,896	6,105,392	203,194	6,308,586	20,694,246	9,237,290	19,009,135	48,940,671	1,624,437	50,565,108

State	Active mines	Injuries											
		Fatal						Nonfatal					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Alabama	20	2	2	--------	4	--------	4	43	3	5	51	--------	51
Michigan	37	3	--------	1	4	--------	4	256	18	7	281	--------	281
Minnesota	120	1	--------	2	3	--------	3	29	27	137	193	--------	193
Missouri	4	--------	--------	--------	--------	--------	--------	3	1	--------	4	--------	4
Nevada	4	--------	--------	--------	--------	--------	--------	--------	--------	5	5	--------	5
New Jersey	5	--------	--------	--------	--------	--------	--------	55	10	--------	65	--------	65
New York	5	--------	--------	2	2	--------	2	8	1	7	16	--------	16
Texas	4	--------	--------	--------	--------	--------	--------	--------	--------	2	2	--------	2
Utah	6	--------	--------	--------	--------	--------	--------	--------	--------	7	7	--------	7
Wisconsin	3	--------	--------	--------	--------	--------	--------	95	6	--------	101	--------	101
Other States [1]	8	2	--------	--------	2	--------	2	39	7	5	51	--------	51
Total	216	8	2	5	15	--------	15	528	73	175	776	--------	776

[1] Includes California, Colorado, Georgia, New Mexico, Pennsylvania, Virginia, and Wyoming.

TABLE 16.—*Employment data and injury experience at gold-silver lode mines, by States and Alaska, 1955*

State	Active mines	Men employed						Average days active					
		Underground	Surface	Open-cut	Total	Office workers	Grand total	Underground	Surface	Open-cut	Total	Office workers	Grand total
Arizona	8	66	31	36	133	1	134	267	241	148	229	340	230
California	61	367	120	24	511	11	522	248	253	94	242	279	248
Colorado	24	158	58	-------	216	8	224	252	279	-------	259	295	261
Idaho	18	562	160	-------	722	21	743	256	224	-------	249	255	249
Nevada	22	61	8	6	75	1	76	228	324	44	224	294	225
South Dakota	3	959	97	1	1,057	4	1,061	308	309	83	308	286	308
Other States [1]	40	125	43	12	180	5	185	208	280	39	214	275	215
Total	176	2,298	517	79	2,894	51	2,945	273	260	110	266	273	266

State	Active mines	Man-days worked						Man-hours worked					
		Underground	Surface	Open-cut	Total	Office workers	Grand total	Underground	Surface	Open-cut	Total	Office workers	Grand total
Arizona	8	17,600	7,484	5,340	30,424	340	30,764	140,288	59,873	42,720	242,881	2,720	245,601
California	61	91,050	30,321	2,257	123,628	3,066	126,694	724,700	242,407	17,782	984,889	23,330	1,008,219
Colorado	24	39,848	16,184	-------	56,032	2,357	58,389	317,807	129,472	-------	447,279	17,816	465,095
Idaho	18	144,108	35,862	-------	179,970	5,355	185,325	1,152,552	284,800	-------	1,437,352	42,836	1,480,188
Nevada	22	13,923	2,590	264	16,777	294	17,071	111,258	20,720	2,112	134,090	2,352	136,442
South Dakota	3	295,307	29,985	83	325,375	1,144	326,519	2,362,461	239,880	664	2,603,095	9,152	2,612,157
Other States [1]	40	25,947	11,774	732	38,453	1,374	39,827	208,678	95,963	6,656	311,297	10,092	321,389
Total	176	627,783	134,200	8,676	770,659	13,930	784,589	5,017,744	1,073,115	69,934	6,160,793	108,298	6,269,091

State	Active mines	Injuries											
		Fatal						Nonfatal					
		Underground	Surface	Open-cut	Total	Office workers	Grand total	Underground	Surface	Open-cut	Total	Office workers	Grand total
Arizona	8	-------	-------	-------	-------	-------	-------	10	-------	-------	10	-------	10
California	61	1	-------	-------	1	-------	1	38	2	1	41	-------	41
Colorado	24	-------	1	-------	1	-------	1	19	1	-------	20	-------	20
Idaho	18	2	-------	-------	2	-------	2	198	9	-------	207	-------	207
Nevada	22	-------	-------	-------	-------	-------	-------	11	8	1	20	-------	20
South Dakota	3	5	-------	-------	5	-------	5	139	26	-------	165	-------	165
Other States [1]	40	1	-------	-------	1	-------	1	17	5	-------	22	-------	22
Total	176	9	1	-------	10	-------	10	432	51	2	485	-------	485

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[1] Includes Montana, New Mexico, Oregon, Utah, Washington, Wyoming, and Alaska.

TABLE 17.—*Employment data and injury experience at lead-zinc mines, by States, 1955*

State	Active mines	Men employed						Average days active					
		Underground	Surface	Open-cut	Total	Office-workers	Grand total	Underground	Surface	Open-cut	Total	Office-workers	Grand total
Arizona	15	374	119	-	493	17	510	290	293	-	291	297	291
California	7	212	50	-	262	7	269	217	216	-	217	173	216
Colorado	43	856	204	5	1,065	45	1,110	253	259	53	254	256	254
Idaho	32	1,661	585	-	2,246	54	2,300	247	233	-	244	259	244
Illinois	7	58	21	-	79	5	84	299	309	-	301	297	302
Kansas	15	285	37	-	322	-	322	283	276	-	282	-	282
Missouri	4	1,608	269	-	1,877	601	2,478	253	249	-	252	254	253
Montana	9	1,096	129	-	1,225	119	1,344	295	309	-	297	365	303
Nevada	18	117	42	3	162	13	175	236	268	24	240	266	242
New Mexico	11	219	66	9	294	17	311	210	215	223	212	159	209
Oklahoma	21	714	64	3	781	6	787	173	309	60	184	306	184
Tennessee	8	445	75	-	520	7	527	235	226	-	234	245	234
Utah	10	972	208	-	1,180	7	1,187	287	290	-	288	228	287
Washington	6	173	31	39	243	7	250	281	253	293	279	220	277
Wisconsin	9	123	51	-	174	5	179	249	247	-	248	253	249
Other States [1]	5	654	78	1	733	95	828	271	261	167	270	255	268
Total	220	9,567	2,029	60	11,656	1,005	12,661	256	257	235	256	268	257

State	Active mines	Man-days worked						Man-hours worked					
		Underground	Surface	Open-cut	Total	Office-workers	Grand total	Underground	Surface	Open-cut	Total	Office-workers	Grand total
Arizona	15	108,669	34,820	-	143,489	5,043	148,532	868,352	278,553	-	1,146,905	40,337	1,187,242
California	7	46,104	10,824	-	56,928	1,213	58,141	368,677	86,546	-	455,223	9,704	464,927
Colorado	43	216,991	52,781	266	270,038	11,520	281,558	1,735,910	422,252	2,128	2,160,290	91,966	2,252,256
Idaho	32	410,817	136,200	-	547,017	13,963	560,980	3,286,000	1,100,708	-	4,386,708	111,708	4,498,416
Illinois	7	17,354	6,496	-	23,850	1,485	25,335	138,835	51,970	-	190,805	11,880	202,685
Kansas	15	80,741	10,208	-	90,949	-	90,949	645,923	81,666	-	727,589	-	727,589
Missouri	4	406,639	66,945	-	473,584	152,484	626,068	3,253,112	535,550	-	3,788,662	1,219,872	5,008,534
Montana	9	323,765	39,851	-	363,616	43,451	407,067	2,590,122	318,808	-	2,908,930	347,608	3,256,538
Nevada	18	27,650	11,235	72	38,957	3,460	42,417	218,243	89,484	576	308,303	27,530	335,833
New Mexico	11	46,081	14,204	2,011	62,296	2,695	64,991	368,902	113,630	16,088	498,620	21,327	519,947
Oklahoma	21	123,420	19,763	180	143,363	1,836	145,199	987,368	158,100	1,440	1,146,908	14,688	1,161,596
Tennessee	8	104,471	16,950	-	121,421	1,714	123,135	835,764	135,602	-	971,366	13,711	985,077
Utah	10	279,002	60,407	-	339,409	1,595	341,004	2,232,016	483,255	-	2,715,271	11,608	2,726,879
Washington	6	48,546	7,841	11,419	67,806	1,540	69,346	388,371	62,732	95,628	546,731	12,323	559,054
Wisconsin	9	30,651	12,586	-	43,237	1,267	44,504	245,207	100,699	-	345,906	10,134	356,040
Other States [1]	5	177,181	20,386	167	197,734	24,269	222,003	1,417,459	163,094	1,336	1,581,889	194,148	1,776,037
Total	220	2,448,082	521,497	14,115	2,983,694	267,535	3,251,229	19,580,261	4,182,649	117,196	23,880,106	2,138,544	26,018,650

State	Active mines	Injuries											
		Fatal						Nonfatal					
		Underground	Surface	Open-cut	Total	Office-workers	Grand total	Underground	Surface	Open-cut	Total	Office-workers	Grand total
Arizona	15	-	1	-	1	-	1	127	6	-	133	-	133
California	7	-	-	-	-	-	-	15	1	-	16	-	16
Colorado	43	2	-	-	2	-	2	171	20	2	193	-	193
Idaho	32	3	-	-	3	-	3	407	31	-	438	-	438
Illinois	7	-	-	-	-	-	-	8	-	-	8	-	8
Kansas	15	1	-	-	1	-	1	33	-	-	33	-	33
Missouri	4	1	-	-	1	-	1	153	-	-	153	-	153
Montana	9	3	-	-	3	-	3	118	5	-	123	-	123
Nevada	18	-	-	-	-	-	-	22	3	-	25	1	26
New Mexico	11	-	-	-	-	-	-	49	3	-	52	-	52
Oklahoma	21	1	-	-	1	-	1	29	1	-	30	-	30
Tennessee	8	-	-	-	-	-	-	27	2	-	29	-	29
Utah	10	3	-	-	3	-	3	100	6	-	106	-	106
Washington	6	-	-	-	-	-	-	52	2	6	60	-	60
Wisconsin	9	-	-	-	-	-	-	28	3	-	31	-	31
Other States [1]	5	1	-	-	1	-	1	148	5	-	153	-	153
Total	220	15	1	-	16	-	16	1,487	88	8	1,583	1	1,584

[1] Includes New Jersey, New York, and Virginia.

TABLE 18.—*Employment data and injury experience at miscellaneous metal mines, by States and Alaska, 1955*

State	Active mines	Men employed						Average days active					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Arizona	42	321	57	24	402	18	420	263	245	92	250	240	250
Alaska	11	38	82	4	124	6	130	206	298	51	262	225	260
Arkansas	11	103	26	195	324	59	383	257	256	219	234	254	237
California	204	656	151	336	1,143	116	1,259	244	256	129	212	302	220
Colorado	201	1,303	204	35	1,542	349	1,891	277	275	131	274	311	281
Florida	4	--------	--------	100	100	37	137	--------	--------	333	333	259	313
Idaho	5	65	12	30	107	7	114	290	354	152	259	262	259
Montana	7	531	67	52	650	59	709	286	291	350	292	306	293
Nevada	93	748	153	156	1,057	48	1,105	273	293	267	275	278	275
New Mexico	28	170	33	145	348	39	387	278	271	249	265	302	269
Utah	83	456	142	30	628	17	645	243	250	196	242	219	242
Wyoming	30	--------	--------	102	102	3	105	--------	--------	145	145	187	146
Other States [1]	35	565	86	160	811	41	852	284	274	161	259	256	259
Total	754	4,956	1,013	1,369	7,338	799	8,137	269	273	200	257	292	260

State	Active mines	Man-days worked						Man-hours worked					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Arizona	42	84,376	13,937	2,197	100,510	4,319	104,829	674,555	111,390	17,573	803,518	34,672	838,190
Alaska	11	7,846	24,395	205	32,446	1,350	33,796	63,948	197,030	1,635	262,613	16,960	279,573
Arkansas	11	26,497	6,648	42,632	75,777	15,012	90,789	211,980	53,183	341,480	606,643	124,232	730,875
California	204	160,315	38,687	43,358	242,360	35,047	277,407	1,289,144	311,989	348,380	1,949,513	280,374	2,229,887
Colorado	201	361,375	56,200	4,587	422,162	108,396	530,558	2,891,699	449,396	35,740	3,376,835	867,161	4,243,996
Florida	4	--------	--------	33,342	33,342	9,567	42,909	--------	--------	266,740	266,740	76,536	343,276
Idaho	5	18,882	4,248	4,560	27,690	1,831	29,521	151,057	33,986	36,465	221,508	14,650	236,158
Montana	7	152,070	19,465	18,200	189,735	18,043	207,778	1,216,556	158,170	145,600	1,520,326	144,345	1,664,671
Nevada	93	204,007	44,847	41,687	290,541	13,364	303,905	1,633,078	358,884	336,950	2,328,912	107,411	2,436,323
New Mexico	28	47,329	8,955	36,098	92,382	11,762	104,144	378,628	71,637	288,318	738,583	94,250	832,833
Utah	83	110,815	35,439	5,888	152,142	3,731	155,873	889,856	284,157	47,114	1,221,127	29,498	1,250,625
Wyoming	30	--------	--------	14,761	14,761	560	15,321	--------	--------	125,066	125,066	4,480	129,546
Other States [1]	35	160,479	23,524	25,784	209,787	10,505	220,292	1,283,788	188,195	207,482	1,679,465	82,832	1,762,297
Total	754	1,333,991	276,345	273,299	1,883,635	233,487	2,117,122	10,684,289	2,218,017	2,198,543	15,100,849	1,877,401	16,978,250

State	Active mines	Injuries											
		Fatal						Nonfatal					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Arizona	42	--------	--------	1	1	--------	1	41	5	2	48	--------	48
Alaska	11	--------	1	--------	1	--------	1	5	23	--------	28	--------	28
Arkansas	11	--------	--------	--------	--------	--------	--------	9	--------	13	22	--------	22
California	204	1	--------	--------	1	--------	1	231	11	16	258	--------	258
Colorado	201	3	--------	--------	3	--------	3	181	37	8	226	--------	226
Florida	4	--------	--------	--------	--------	--------	--------	--------	--------	2	2	--------	2
Idaho	5	--------	--------	--------	--------	--------	--------	22	2	1	25	--------	25
Montana	7	3	--------	--------	3	--------	3	51	8	14	73	--------	73
Nevada	93	2	--------	--------	2	--------	2	317	45	2	364	--------	364
New Mexico	28	--------	--------	--------	--------	--------	--------	73	--------	13	86	--------	86
Utah	83	--------	--------	--------	--------	--------	--------	106	25	1	132	--------	132
Wyoming	30	--------	--------	--------	--------	--------	--------	--------	--------	4	4	--------	4
Other States [1]	35	1	--------	--------	1	--------	1	95	10	6	111	--------	111
Total	754	10	1	1	12	--------	12	1,131	166	82	1,379	--------	1,379

[1] Includes Alabama, Georgia, Kansas, North Carolina, Oregon, South Carolina, South Dakota, Tennessee, Texas, Virginia, and Washington.

TABLE 19.—*Employment data and injury experience at nonmetal mines, by States and Alaska, 1955*

State	Active mines	Men employed						Average days active						Man-days worked					
		Underground	Surface	Open-cut	Total	Office workers	Grand total	Underground	Surface	Open-cut	Total	Office workers	Grand total	Underground	Surface	Open-cut	Total	Office workers	Grand total
Alabama	19	21	6	49	76	6	82	222	149	220	215	252	218	4,655	896	10,793	16,344	1,509	17,853
Arizona	20	64	12	67	143	3	146	262	281	247	256	287	257	16,779	3,367	16,523	36,669	862	37,531
Arkansas	7	215	42	36	293	23	316	363	363	252	349	260	343	78,045	15,246	9,061	102,352	5,980	108,332
California	146	304	45	526	875	264	1,139	244	242	204	220	254	228	74,212	10,870	107,278	192,360	67,075	259,435
Colorado	51	123	26	117	266	21	287	237	248	224	232	264	234	29,102	6,451	26,180	61,733	5,536	67,269
Florida	21	--------	--------	1,339	1,339	94	1,433	--------	--------	253	253	259	254	--------	--------	339,105	339,105	24,329	363,434
Georgia	42	33	11	508	552	136	688	228	237	257	255	286	261	7,530	2,610	130,605	140,745	38,862	179,607
Idaho	11	41	18	331	390	52	442	305	305	77	111	89	109	12,521	5,492	25,408	43,421	4,647	48,068
Illinois	20	207	31	43	281	46	327	261	269	292	267	261	266	54,037	8,332	12,549	74,918	12,014	86,932
Indiana	3	32	2	20	54	--------	54	80	80	282	155	--------	155	2,573	160	5,632	8,365	--------	8,365
Iowa	23	--------	--------	185	185	--------	185	--------	--------	273	273	--------	273	--------	--------	50,433	50,433	--------	50,433
Kansas	6	31	5	15	51	6	57	257	257	291	267	276	268	7,980	1,284	4,365	13,629	1,655	15,284
Kentucky	31	208	59	167	431	21	455	212	169	145	180	272	185	44,105	9,964	24,210	78,279	5,704	83,983
Louisiana	15	105	1,088	24	1,217	11	1,228	275	357	122	345	280	345	28,855	388,374	2,922	420,151	3,075	423,226
Maryland	8	32	3	23	58	21	79	228	257	162	203	260	219	7,300	771	3,731	11,802	5,460	17,262
Michigan	11	256	89	44	389	--------	389	298	288	307	297	--------	297	76,340	25,633	13,503	115,476	--------	115,476
Missouri	51	--------	3	326	329	332	661	--------	282	133	134	251	193	--------	846	43,399	44,245	83,448	127,693
Montana	15	279	65	95	439	60	499	266	269	194	251	308	258	74,125	17,461	18,464	110,050	18,474	128,524
Nevada	29	36	6	159	201	22	223	258	293	252	254	269	256	9,305	1,759	40,054	51,118	5,924	57,042
New Mexico	25	1,086	224	70	1,380	77	1,457	359	360	186	350	303	348	389,641	80,543	13,036	483,220	23,333	506,553
New York	15	677	81	29	787	44	831	276	278	258	275	267	275	186,745	22,494	7,485	216,724	11,729	228,453
North Carolina	141	175	47	445	667	52	719	161	169	206	192	232	195	28,196	7,920	91,710	127,826	12,053	139,879
Ohio	42	384	46	127	557	--------	557	248	242	236	245	--------	245	95,184	11,110	29,997	136,291	--------	136,291
Oklahoma	6	--------	--------	77	77	4	81	--------	--------	263	263	306	265	--------	--------	20,279	20,279	1,224	21,503
Pennsylvania	39	233	74	111	418	79	497	213	235	199	213	199	211	49,725	17,375	22,134	89,234	15,708	104,942
South Carolina	21	2	--------	157	159	33	192	5	--------	250	246	264	249	10	--------	39,173	39,183	8,700	47,883
South Dakota	17	24	13	74	111	11	122	263	303	270	272	291	274	6,321	3,934	19,985	30,240	3,205	33,445
Tennessee	25	--------	--------	348	348	30	378	--------	--------	198	198	266	203	--------	--------	68,787	68,787	7,967	76,754
Texas	29	18	910	151	1,079	88	1,167	284	365	240	346	267	340	5,111	332,047	36,258	373,416	23,463	396,879
Utah	28	179	60	83	322	40	362	252	252	217	243	323	252	45,097	15,126	18,035	78,258	12,915	91,173
Vermont	4	19	3	111	133	16	149	274	353	254	259	258	259	5,202	1,060	28,172	34,434	4,132	38,566
Virginia	9	146	2	118	266	45	311	312	311	258	288	157	269	45,582	622	30,440	76,644	7,064	83,708
Washington	15	--------	--------	94	94	1	95	--------	--------	224	224	300	225	--------	--------	21,040	21,040	300	21,340
West Virginia	3	61	17	8	86	--------	86	295	303	194	287	--------	287	17,998	5,156	1,552	24,706	--------	24,706
Wyoming	16	132	9	89	230	112	342	255	249	212	238	258	245	33,626	2,244	18,907	54,777	28,921	83,698
Other States[1]	54	26	3	189	218	19	237	341	315	209	226	272	230	8,875	1,035	39,443	49,353	5,159	54,512
Total	1,018	5,149	3,000	6,355	14,504	1,769	16,273	281	333	219	264	255	263	1,444,777	1,000,182	1,390,648	3,835,607	450,427	4,286,034

See footnote at end of table, p. 36.

TABLE 19.—*Employment data and injury experience at nonmetal mines, by States and Alaska, 1955*—Continued

State	Active mines	Man-hours worked						Injuries											
								Fatal						Nonfatal					
		Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total	Underground	Surface	Opencut	Total	Office workers	Grand total
Alabama	19	40, 677	6, 860	89, 057	136, 594	11, 822	148, 416									1	1		1
Arizona	20	134, 234	26, 936	130, 680	291, 850	6, 896	298, 746							6	6	2	14		14
Arkansas	7	624, 360	121, 968	77, 516	823, 844	47, 840	871, 684	1			1		1	63	1	10	74		74
California	146	593, 216	86, 950	897, 793	1, 577, 959	531, 850	2, 109, 809							38	2	31	71	4	75
Colorado	51	232, 371	51, 603	208, 796	492, 770	44, 291	537, 061			1	1		1	17	3	4	24		24
Florida	21			2, 787, 447	2, 787, 447	195, 899	2, 983, 346			1	1		1			15	15		15
Georgia	42	68, 540	22, 776	1, 100, 027	1, 191, 343	300, 095	1, 491, 438							8	1	35	44		44
Idaho	11	100, 168	43, 936	203, 934	348, 038	109, 320	457, 358	1			1		1	20		7	27		27
Illinois	20	432, 295	66, 656	100, 390	599, 341	96, 115	695, 456	1			1		1	31	1	2	34		34
Indiana	3	20, 583	1, 280	45, 056	66, 919		66, 919									1	1		1
Iowa	23			406, 399	406, 399		406, 399									5	5		5
Kansas	6	63, 839	10, 269	34, 916	109, 024	13, 240	122, 264							3			3		3
Kentucky	31	351, 763	81, 089	192, 358	625, 210	47, 723	672, 933	1			1		1	19		8	27		27
Louisiana	15	250, 393	3, 109, 598	23, 376	3, 383, 367	24, 601	3, 407, 968		1		1		1	3	42	1	46		46
Maryland	8	58, 400	6, 168	29, 494	94, 062	43, 680	137, 742							5	1		6		6
Michigan	11	610, 725	205, 066	108, 820	924, 611		924, 611							4	6	1	11		11
Missouri	51		6, 770	369, 723	376, 493	667, 594	1, 044, 087			2	2		2			8	8	1	9
Montana	15	592, 821	139, 488	145, 452	877, 761	147, 950	1, 025, 711	1			1		1	33	2	7	42		42
Nevada	29	74, 765	14, 074	320, 900	409, 739	47, 392	457, 131							9		38	47		47
New Mexico	25	3, 117, 124	644, 344	101, 678	3, 863, 146	186, 671	4, 049, 817							193	21	6	220		220
New York	15	1, 542, 799	187, 125	59, 876	1, 789, 800	92, 953	1, 882, 753			1	1		1	36	4	5	45		45
North Carolina	141	225, 246	63, 500	745, 407	1, 034, 153	97, 557	1, 131, 710			1	1		1	13	4	26	43		43
Ohio	42	766, 867	89, 024	247, 491	1, 103, 382		1, 103, 382	2			2		2	48		3	51		51
Oklahoma	6			164, 875	164, 875	9, 792	174, 667			1	1		1			3	3		3
Pennsylvania	39	399, 252	136, 658	170, 685	706, 595	148, 486	855, 081			1	1		1	13		20	33		33
South Carolina	21	80		321, 313	321, 393	63, 255	384, 648									5	5		5
South Dakota	17	50, 568	31, 472	164, 523	246, 563	25, 540	272, 103							2		15	17		17
Tennessee	25			552, 417	552, 417	63, 963	616, 380									7	7		7
Texas	29	40, 887	2, 656, 904	296, 587	2, 994, 378	187, 613	3, 181, 991		1		1		1		77	16	93		93
Utah	28	360, 780	121, 010	143, 899	625, 689	103, 318	729, 007							45	8	9	62		62
Vermont	4	46, 820	12, 896	226, 659	286, 375	34, 812	321, 187							2		10	12		12
Virginia	9	364, 660	4, 976	285, 649	655, 285	92, 820	748, 105	1			1		1	2		19	21		21
Washington	15			168, 060	168, 060	2, 400	170, 460									7	7		7
West Virginia	3	143, 984	41, 248	11, 791	197, 023		197, 023							6			6		6
Wyoming	16	269, 009	17, 950	167, 742	454, 701	231, 418	686, 119	1			1		1	1		6	7		7
Other States [1]	54	71, 250	8, 280	326, 492	406, 022	41, 268	447, 290							4		20	24		24
Total	1, 018	11, 648, 476	8, 016, 874	11, 427, 278	31, 092, 628	3, 718, 174	34, 810, 802	9	2	8	19		19	624	179	353	1, 156	5	1, 161

[1] Includes Alaska, Connecticut, Maine, Minnesota, Mississippi, Nebraska, New Hampshire, New Jersey, North Dakota, Oregon, and Wisconsin.

SELECTED INJURY DATA

(Tables 20–28)

MISCELLANEOUS METAL MINES

TABLE 20.—*Employment data and injury experience at miscellaneous metal mines, by metal and location, 1955*

Metal	Active mines	Men employed						Average days active					
		Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total
Antimony	8	13	9	1	23	2	25	147	260	310	198	268	204
Bauxite	14	109	215	27	351	66	417	260	213	258	231	248	234
Chromite	81	202	91	37	330	48	378	244	80	169	191	297	204
Manganese	54	588	177	81	846	28	874	265	221	262	255	287	256
Mercury	50	301	70	104	475	17	492	273	126	316	260	234	259
Molybdenum	3	613	-------	50	663	302	965	309	-------	312	309	309	309
Pyrite	4	111	50	53	214	17	231	224	197	237	221	255	223
Titanium	6	-------	164	-------	164	42	206	-------	268	-------	268	243	263
Tungsten	199	1,623	283	313	2,219	157	2,376	276	203	290	268	306	271
Vanadium-uranium	327	1,376	293	334	2,003	115	2,118	254	191	258	245	288	248
Other metals [1]	8	20	17	13	50	5	55	282	164	287	243	268	245
Total	754	4,956	1,369	1,013	7,338	799	8,137	269	200	273	257	292	260

Metal	Active mines	Man-days worked						Man-hours worked					
		Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total
Antimony	8	1,907	2,341	310	4,558	536	5,094	15,536	18,716	2,480	36,732	4,288	41,020
Bauxite	14	28,379	45,875	6,957	81,211	16,395	97,606	227,036	367,742	55,655	650,433	135,298	785,731
Chromite	81	49,376	7,270	6,251	62,897	14,255	77,152	395,784	56,498	51,891	504,173	114,041	618,214
Manganese	54	155,619	39,193	21,216	216,028	8,037	224,065	1,244,555	314,452	169,371	1,728,378	64,288	1,792,666
Mercury	50	82,051	8,809	32,826	123,686	3,973	127,659	654,833	72,574	262,609	990,016	38,347	1,028,363
Molybdenum	3	189,405	-------	15,614	205,019	93,321	298,340	1,515,237	-------	124,905	1,640,142	746,722	2,386,864
Pyrite	4	24,846	9,834	12,570	47.250	4,334	51,584	198,768	78,650	100,560	377,978	34,670	412,648
Titanium	6	-------	43,882	-------	43,882	10,217	54,099	-------	351,061	-------	351,061	81,736	432,797
Tungsten	199	447,639	57,399	90,626	595,664	47,905	643,569	3,588,903	462,591	729,846	4,781,340	383,456	5,164,796
Vanadium-uranium	327	349,129	55,906	86,245	491,280	33,174	524,454	2,798,517	453,888	690,860	3,943,265	263,835	4,207,100
Other metals [1]	8	5,640	2,790	3,730	12,160	1,340	13,500	45,120	22,371	29,840	97,331	10,720	108,051
Total	754	1,333,991	273,299	276,345	1,883,635	233,487	2,117,122	10,684,289	2,198,543	2,218,017	15,100,849	1,877,401	16,978,250

Metal	Active mines	Average hours worked per man per day						Average hours worked per man per year					
		Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total
Antimony	8	8.15	7.99	8.00	8.06	8.00	8.05	1,195	2,080	2,480	1,597	2,144	1,641
Bauxite	14	8.00	8.02	8.00	8.01	8.25	8.05	2,083	1,710	2,061	1,853	2,050	1,884
Chromite	81	8.02	7.77	8.30	8.02	8.00	8.01	1,959	621	1,402	1,528	2,376	1,635
Manganese	54	8.00	8.02	7.98	8.00	8.00	8.00	2,117	1,777	2,091	2,043	2,296	2,051
Mercury	50	7.98	8.24	8.00	8.00	9.65	8.06	2,176	1,037	2,525	2,084	2,256	2,090
Molybdenum	3	8.00	-------	8.00	8.00	8.00	8.00	2,472	-------	2,498	2,474	2,473	2,473
Pyrite	4	8.00	8.00	8.00	8.00	8.00	8.00	1,791	1,573	1,897	1,766	2,039	1,786
Titanium	6	-------	8.00	-------	8.00	8.00	8.00	-------	2,141	-------	2,141	1,946	2,101
Tungsten	199	8.02	8.06	8.05	8.03	8.00	8.03	2,211	1,635	2,332	2,155	2,442	2,174
Vanadium-uranium	327	8.02	8.12	8.01	8.03	7.95	8.02	2,034	1,549	2,068	1,969	2,294	1,986
Other metals [1]	8	8.00	8.02	8.00	8.00	8.00	8.00	2,256	1,316	2,295	1,947	2,144	1,965
Total	754	8.00	8.04	8.03	8.02	8.04	8.02	2,156	1,606	2,190	2,058	2,350	2,087

See footnote at end of table, p. 38.

TABLE 20.—*Employment data and injury experience at miscellaneous metal mines, by metal and location, 1955*—Continued

Metal	Active mines	Injuries											
		Fatal						Nonfatal					
		Under-ground	Open-cut	Surface	Total	Office workers	Grand total	Under-ground	Open-cut	Surface	Total	Office workers	Grand total
Antimony	8	--------	--------	--------	--------	--------	--------	1	--------	--------	1	--------	1
Bauxite	14	--------	--------	--------	--------	--------	--------	9	13	--------	22	--------	22
Chromite	81	--------	--------	--------	--------	--------	--------	46	3	6	55	--------	55
Manganese	54	3	1	--------	4	--------	4	82	12	1	95	--------	95
Mercury	50	1	--------	1	2	--------	2	92	--------	38	130	--------	130
Molybdenum	3	--------	--------	--------	--------	--------	--------	96	--------	8	104	--------	104
Pyrite	4	--------	--------	--------	--------	--------	--------	9	4	3	16	--------	16
Titanium	6	--------	--------	--------	--------	--------	--------	--------	3	--------	3	--------	3
Tungsten	199	3	--------	--------	3	--------	3	569	28	49	646	--------	646
Vanadium-uranium	327	3	--------	--------	3	--------	3	224	19	58	301	--------	301
Other metals [1]	8	--------	--------	--------	--------	--------	--------	3	--------	3	6	--------	6
Total	754	10	1	1	12	--------	12	1,131	82	166	1,379	--------	1,379

[1] Includes cobalt and other minor metals.

NONMETAL MINES

TABLE 21.—*Employment data and injury experience at nonmetal mines, by location and by nonmetals, 1955*

Nonmetal	Active mines	Men employed						Average days active					
		Under-ground	Open-cut	Surface	Total	Office workers	Grand total	Under-ground	Open-cut	Surface	Total	Office workers	Grand total
Abrasives	62	24	252	11	287	172	459	318	208	253	219	255	232
Asbestos	14	73	116	14	203	9	212	231	236	241	235	272	236
Asphalt	8	61	164	44	269	15	284	267	153	265	197	286	202
Barite	20	225	179	44	448	39	487	358	158	357	278	256	276
Clay	504	1,036	2,245	220	3,501	702	4,203	231	217	235	223	256	228
Feldspar-mica-quartz	165	226	418	60	704	34	738	179	199	197	192	235	194
Fluorspar	27	314	28	68	410	58	468	255	116	221	240	268	243
Gypsum	46	741	481	51	1,273	100	1,373	278	284	266	280	288	280
Phosphate rock	40	367	1,906	90	2,363	213	2,576	264	213	271	224	228	224
Potash	5	1,075	--------	222	1,297	73	1,370	360	--------	361	360	304	357
Salt	11	514	28	137	679	34	713	281	316	284	283	280	283
Sulfur	8	--------	26	1,980	2,006	1	2,007	--------	200	361	359	258	359
Talc and soapstone	61	203	168	32	403	74	477	267	220	266	247	190	238
Minor nonmetals [1]	47	290	344	27	661	245	906	257	251	268	255	259	256
Total	1,018	5,149	6,355	3,000	14,504	1,769	16,273	281	219	333	264	255	263

Nonmetal	Active mines	Man-days worked						Man-hours worked					
		Under-ground	Opencut	Surface	Total	Office workers	Grand total	Under-ground	Opencut	Surface	Total	Office workers	Grand total
Abrasives	62	7,630	52,428	2,780	62,838	43,807	106,645	61,040	418,128	22,240	501,408	354,974	856,382
Asbestos	14	16,849	27,432	3,375	47,656	2,445	50,101	134,790	219,459	26,990	381,239	19,558	400,797
Asphalt	8	16,312	25,150	11,646	53,108	4,295	57,403	130,496	202,222	93,170	425,888	36,551	462,439
Barite	20	80,445	28,266	15,726	124,437	9,967	134,404	643,560	243,958	125,808	1,013,326	79,968	1,093,294
Clay	504	239,658	488,131	51,657	779,446	179,391	958,837	1,926,023	4,004,006	412,571	6,342,600	1,438,748	7,781,348
Feldspar-mica-quartz	165	40,378	83,227	11,806	135,411	7,997	143,408	322,712	696,345	94,584	1,113,641	63,869	1,177,510
Fluorspar	27	80,026	3,243	15,037	98,306	15,555	113,861	640,750	23,688	120,371	784,809	124,354	909,163
Gypsum	46	206,162	136,604	13,549	356,315	28,750	385,065	1,651,387	1,102,638	111,333	2,865,358	229,971	3,095,329
Phosphate rock	40	97,008	406,711	24,432	528,151	48,666	576,817	776,064	3,328,266	195,256	4,299,586	462,988	4,762,574
Potash	5	387,085	--------	80,063	467,148	22,228	489,376	3,096,676	--------	640,504	3,737,180	177,825	3,915,005
Salt	11	144,661	8,859	38,945	192,465	9,515	201,980	1,195,239	100,072	316,456	1,611,767	72,242	1,684,009
Sulfur	8	--------	5,198	715,409	720,607	258	720,865	--------	41,584	5,723,275	5,764,859	2,064	5,766,923
Talc and soapstone	61	54,118	86,907	8,513	99,538	14,074	113,612	474,337	336,415	76,366	887,118	149,514	1,036,632
Minor nonmetals [1]	47	74,445	88,492	7,244	170,181	63,479	233,660	595,402	710,497	57,950	1,363,849	505,548	1,869,397
Total	1,018	1,444,777	1,390,648	1,000,182	3,835,607	450,427	4,286,034	11,648,476	11,427,278	8,016,874	31,092,628	3,718,174	34,810,802

See footnote at end of table, p. 39.

TABLE 21.—*Employment data and injury experience at nonmetal mines, by location and by nonmetals, 1955*—Continued

Nonmetal	Active mines	Average hours worked per man per day						Average hours worked per man per year					
		Underground	Open-cut	Surface	Total	Office workers	Grand total	Underground	Open-cut	Surface	Total	Office workers	Grand total
Abrasives	62	8.00	7.98	8.00	7.98	8.10	8.03	2,543	1,659	2,022	1,747	2,064	1,866
Asbestos	14	8.00	8.00	8.00	8.00	8.00	8.00	1,846	1,892	1,928	1,878	2,173	1,891
Asphalt	8	8.00	8.04	8.00	8.02	8.51	8.06	2,139	1,233	2,118	1,583	2,437	1,628
Barite	20	8.00	8.63	8.00	8.14	8.02	8.13	2,860	1,363	2,859	2,262	2,050	2,245
Clay	504	8.04	8.20	7.99	8.14	8.02	8.12	1,859	1,784	1,875	1,812	2,049	1,851
Feldspar-mica-quartz	165	7.99	8.37	8.01	8.22	7.99	8.21	1,428	1,666	1,576	1,582	1,879	1,596
Fluorspar	27	8.01	7.30	8.00	7.98	7.99	7.98	2,041	846	1,770	1,914	2,144	1,943
Gypsum	46	8.01	8.07	8.22	8.04	8.00	8.04	2,229	2,292	2,183	2,251	2,300	2,254
Phosphate rock	40	8.00	8.18	7.99	8.14	9.51	8.26	2,115	1,746	2,170	1,820	2,174	1,849
Potash	5	8.00	--------	8.00	8.00	8.00	8.00	2,881	--------	2,885	2,881	2,436	2,858
Salt	11	8.26	11.30	8.13	8.37	7.59	8.34	2,325	3,574	2,310	2,374	2,125	2,362
Sulfur	8	--------	8.00	8.00	8.00	8.00	8.00	--------	1,599	2,891	2,874	2,064	2,873
Talc and soapstone	61	8.76	9.12	8.97	8.91	10.62	9.12	2,337	2,002	2,386	2,201	2,020	2,173
Minor nonmetals [1]	47	8.00	8.03	8.00	8.01	7.96	8.00	2,053	2,065	2,146	2,063	2,063	2,063
Total	1,018	8.06	8.22	8.02	8.11	8.25	8.12	2,262	1,798	2,672	2,144	2,102	2,139

Nonmetal	Active mines	Injuries											
		Fatal						Nonfatal					
		Underground	Open-cut	Surface	Total	Office workers	Grand total	Underground	Open-cut	Surface	Total	Office workers	Grand total
Abrasives	62	1	1	--------	2	--------	2	--------	9	--------	9	--------	9
Asbestos	14	--------	--------	--------	--------	--------	--------	6	8	6	20	--------	20
Asphalt	8	--------	--------	--------	--------	--------	--------	16	4	6	26	1	27
Barite	20	1	1	--------	2	--------	2	63	14	1	78	--------	78
Clay	504	3	4	--------	7	--------	7	110	134	3	247	4	251
Feldspar-mica-quartz	165	--------	1	--------	1	--------	1	17	47	3	67	--------	67
Fluorspar	27	--------	--------	--------	--------	--------	--------	47	4	2	53	--------	53
Gypsum	46	1	--------	--------	1	--------	1	15	16	--------	31	--------	31
Phosphate rock	40	2	1	--------	3	--------	3	71	27	4	102	--------	102
Potash	5	--------	--------	--------	--------	--------	--------	193	--------	21	214	--------	214
Salt	11	--------	--------	--------	--------	--------	--------	30	9	9	48	--------	48
Sulfur	8	--------	--------	2	2	--------	2	--------	1	119	120	--------	120
Talc and soapstone	61	--------	--------	--------	--------	--------	--------	40	24	3	67	--------	67
Minor nonmetals [1]	47	1	--------	--------	1	--------	1	16	56	2	74	--------	74
Total	1,018	9	8	2	19	--------	19	624	353	179	1,156	5	1,161

[1] Includes greensand, kyanite, magnesite, mineral pigments, olivine, spodumene, gem stones, vermiculite, and perlite.

CLAY MINES

Clay is an earthy material or soft rock that, when finely ground and mixed with water, forms a pasty moldable mass, and hardens when baked or fired. It is found in many States. Numerous minerals contain varying proportions of clay as impurities. This circular does not attempt to break clay down into different classes; instead, it presents a simplified classification used by the Branch of Accident Analysis of the Bureau of Mines for statistical canvassing.

Tables 22 and 23 present employment data and injury experience at clay mines in the United States for the calendar year 1955.

TABLE 22.—*Employment data and injury experience at clay mines in the United States, 1955*

	Active mines	Men employed	Man-days worked	Average days active	Man-hours worked	Injuries		Injury-frequency rates	
						Fatal	Nonfatal	Fatal	Nonfatal
Underground	76	1,036	239,658	231	1,926,023	3	110	1.56	57.11
Opencut	426	2,245	488,131	217	4,004,006	4	134	1.00	33.47
Surface	2	220	51,657	235	412,571	--------	3	--------	7.27
Total	504	3,501	779,446	223	6,342,600	7	247	1.10	38.94
Total office workers	--------	702	179,391	256	1,438,748	--------	4	--------	2.78
Grand total	504	4,203	958,837	228	7,781,348	7	251	.90	32.26

TABLE 23.—*Employment data and injury experience at clay mines in the United States, by States, 1955*

State	Active mines	Men employed						Average days active					
		Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total
Alabama	18	21	48	6	75	6	81	222	224	149	218	252	220
California	55	11	244	3	258	42	300	178	188	187	188	268	199
Colorado	31	67	55	13	135	4	139	207	192	220	202	151	201
Florida	3	--------	50	--------	50	7	57	--------	257	--------	257	275	259
Georgia	23	--------	458	--------	458	126	584	--------	264	--------	264	287	269
Iowa	19	--------	65	--------	65	--------	65	--------	237	--------	237	--------	237
Kentucky	28	193	63	42	298	10	308	219	174	204	208	254	209
Maryland	7	32	17	3	52	21	73	228	146	257	203	260	219
Missouri	45	--------	239	3	242	318	560	--------	137	282	139	252	203
North Carolina	21	--------	72	--------	72	6	78	--------	276	--------	276	238	273
Ohio	41	336	127	46	509	--------	509	239	236	242	239	--------	239
Pennnsylvania	38	233	110	74	417	76	493	213	201	235	214	65	191
South Carolina	14	--------	117	--------	117	28	145	--------	235	--------	235	259	239
Tennessee	13	--------	58	--------	58	8	66	--------	225	--------	225	294	233
Texas	20	--------	56	2	58	12	70	--------	196	260	198	267	210
Utah	11	43	32	4	79	--------	79	256	200	259	233	--------	233
West Virginia	3	61	8	17	86	--------	86	295	194	303	287	--------	287
Wyoming	10	--------	55	--------	55	10	65	--------	228	--------	228	287	237
Other States [1]	104	39	371	7	417	28	445	267	220	280	225	284	229
Total	504	1,036	2,245	220	3,501	702	4,203	231	217	235	223	256	228

State	Active mines	Man-days worked						Man-hours worked					
		Underground	Opencut	Surface	Total	Office workers	Grand total	Underground	Opencut	Surface	Total	Office workers	Grand total
Alabama	18	4,655	10,763	896	16,314	1,509	17,823	40,677	88,817	6,860	136,354	11,822	148,176
California	55	1,963	45,929	562	48,454	11,277	59,731	15,699	369,248	4,496	389,443	87,838	477,281
Colorado	31	13,848	10,573	2,861	27,282	603	27,885	110,574	84,590	22,884	218,048	4,824	222,872
Florida	3	--------	12,835	--------	12,835	1,924	14,759	--------	102,680	--------	102,680	15,392	118,072
Georgia	23	--------	120,827	--------	120,827	36,110	156,937	--------	1,006,109	--------	1,006,109	278,079	1,284,188
Iowa	19	--------	15,376	--------	15,376	--------	15,376	--------	125,945	--------	125,945	--------	125,945
Kentucky	28	42,305	10,978	8,564	61,847	2,538	64,385	337,309	86,502	69,815	493,626	20,304	513,930
Maryland	7	7,300	2,481	771	10,552	5,460	16,012	58,400	19,494	6,168	84,062	43,680	127,742
Missouri	45	--------	32,846	846	33,692	80,008	113,700	--------	268,107	6,770	274,877	640,074	914,951
North Carolina	21	--------	19,864	--------	19,864	1,430	21,294	--------	161,225	--------	161,225	11,440	172,665
Ohio	41	80,433	29,997	11,110	121,540	--------	121,540	648,856	247,491	89,024	985,371	--------	985,371
Pennsylvania	38	49,725	22,084	17,375	89,184	14,928	104,112	399,252	170,285	136,658	706,195	143,026	849,221
South Carolina	14	--------	27,480	--------	27,480	7,244	34,724	--------	235,595	--------	235,595	51,607	287,202
Tennessee	13	--------	13,053	--------	13,053	2,351	15,404	--------	103,458	--------	103,458	18,808	122,266
Texas	20	--------	10,986	520	11,506	3,205	14,711	--------	93,968	4,680	98,648	25,576	124,224
Utah	11	11,001	6,386	1,034	18,421	--------	18,421	88,012	51,091	8,272	147,375	--------	147,375
West Virginia	3	17,998	1,552	5,156	24,706	--------	24,706	143,984	11,791	41,248	197,023	--------	197,023
Wyoming	10	--------	12,564	--------	12,564	2,865	15,429	--------	116,072	--------	116,072	22,970	139,042
Other States [1]	104	10,430	81,557	1,962	93,949	7,939	101,888	83,260	661,538	15,696	760,494	63,308	823,802
Total	504	239,658	488,131	51,657	779,446	179,391	958,837	1,926,023	4,004,006	412,571	6,342,600	1,438,748	7,781,348

See footnote at end of table, p. 41.

TABLE 23.—*Employment data and injury experience at clay mines in the United States, by States, 1955*—Continued

State	Active mines	Injuries											
		Fatal						Nonfatal					
		Underground	Open-cut	Surface	Total	Office workers	Grand total	Underground	Open-cut	Surface	Total	Office workers	Grand total
Alabama	18	------	------	------	------	------	------	------	1	------	1	------	1
California	55	------	------	------	------	------	------	------	9	------	9	4	13
Colorado	31	------	1	------	1	------	1	10	1	2	13	------	13
Florida	3	------	------	------	------	------	------	------	4	------	4	------	4
Georgia	23	------	------	------	------	------	------	------	29	------	29	------	29
Iowa	19	------	------	------	------	------	------	------	5	------	5	------	5
Kentucky	28	1	------	------	1	------	1	19	6	------	25	------	25
Maryland	7	------	------	------	------	------	------	5	------	1	6	------	6
Missouri	45	------	1	------	1	------	1	------	2	------	2	------	2
North Carolina	21	------	------	------	------	------	------	------	------	------	------	------	------
Ohio	41	2	------	------	2	------	2	46	3	------	49	------	49
Pennsylvania	38	------	1	------	1	------	1	13	20	------	33	------	33
South Carolina	14	------	------	------	------	------	------	------	1	------	1	------	1
Tennessee	13	------	------	------	------	------	------	------	2	------	2	------	2
Texas	20	------	------	------	------	------	------	------	16	------	16	------	16
Utah	11	------	------	------	------	------	------	11	3	------	14	------	14
West Virginia	3	------	------	------	------	------	------	6	------	------	6	------	6
Wyoming	10	------	------	------	------	------	------	------	2	------	2	------	2
Other States [1]	104	------	1	------	1	------	1	------	30	------	30	------	30
Total	504	3	4	------	7	------	7	110	134	3	247	4	251

State	Active mines	Injury—frequency rates											
		Fatal						Nonfatal					
		Underground	Open-cut	Surface	Total	Office workers	Grand total	Underground	Open-cut	Surface	Total	Office workers	Grand total
Alabama	18	------	------	------	------	------	------	------	11.26	------	7.33	------	6.75
California	55	------	------	------	------	------	------	------	24.37	------	23.11	45.54	27.24
Colorado	31	------	11.82	------	4.59	------	4.49	90.44	11.82	87.40	59.62	------	58.33
Florida	3	------	------	------	------	------	------	------	38.96	------	38.96	------	33.88
Georgia	23	------	------	------	------	------	------	------	28.82	------	28.82	------	22.58
Iowa	19	------	------	------	------	------	------	------	39.70	------	39.70	------	39.70
Kentucky	28	2.96	------	------	2.03	------	1.95	56.33	69.36	------	50.65	------	48.64
Maryland	7	------	------	------	------	------	------	85.62	------	162.13	71.38	------	46.97
Missouri	45	------	3.73	------	3.64	------	1.09	------	7.46	------	7.28	------	2.19
North Carolina	21	------	------	------	------	------	------	------	------	------	------	------	------
Ohio	41	3.08	------	------	2.03	------	2.03	70.89	12.12	------	49.73	------	49.73
Pennsylvania	38	------	5.87	------	1.42	------	1.18	32.56	117.45	------	46.73	------	38.86
South Carolina	14	------	------	------	------	------	------	------	4.24	------	4.24	------	3.48
Tennessee	13	------	------	------	------	------	------	------	19.33	------	19.33	------	16.36
Texas	20	------	------	------	------	------	------	------	170.27	------	162.19	------	128.80
Utah	11	------	------	------	------	------	------	124.98	58.72	------	95.00	------	95.00
West Virginia	3	------	------	------	------	------	------	41.67	------	------	30.45	------	30.45
Wyoming	10	------	------	------	------	------	------	------	17.23	------	17.23	------	14.38
Other States [1]	104	------	1.51	------	1.31	------	1.21	------	45.35	------	39.45	------	36.42
Total	504	1.56	1.00	------	1.10	------	.90	57.11	33.47	7.27	38.94	2.78	32.26

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[1] Includes Arizona, Arkansas, Idaho, Illinois, Indiana, Kansas, Louisiana, Maine, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Oklahoma, Oregon, South Dakota, Washington, Wisconsin, and Alaska.

PLACER MINES

Employment, measured by the number of men working at placer mines in the United States and Alaska during 1955, declined 37 percent. Man-hours declined 33 percent. No fatalities were reported; however, nonfatal injuries increased from the 84 injuries in 1954 to 132 in 1955, an increase of 57 percent. The nonfatal injury-frequency rate of 23.87 per million man-hours for 1954, compared with 55.75 for 1955, shows an increase of 134 percent. The average employee had a work year of 1,820 hours and worked a daily 8.50-hour shift.

TABLE 24.—*Employment data and injury experience at placer mines in the United States and Alaska, 1955*

EXCLUDING OFFICE WORKERS

State and Territory	Active mines	Men employed	Man-days worked	Average days active	Man-hours worked	Injuries		Injury-frequency rates	
						Fatal	Nonfatal	Fatal	Nonfatal
Alaska	81	966	201, 773	209	1, 753, 060	----------	108	----------	61. 61
California	21	226	62, 676	277	502, 100	----------	21	----------	41. 82
Idaho	9	50	9, 426	189	75, 545	----------	1	----------	13. 24
Other States [1]	18	59	4, 650	79	37, 211	----------	2	----------	53. 75
Total	129	1, 301	278, 525	214	2, 367, 916	----------	132	----------	55. 75

INCLUDING OFFICE WORKERS

State and Territory	Active mines	Men employed	Man-days worked	Average days active	Man-hours worked	Injuries: Fatal	Injuries: Nonfatal	Injury-frequency rates: Fatal	Injury-frequency rates: Nonfatal
Alaska	81	995	210, 419	211	1, 826, 619	----------	108	----------	59. 13
California	21	243	67, 776	279	540, 525	----------	21	----------	38. 85
Idaho	9	50	9, 426	189	75, 545	----------	1	----------	13. 24
Other States [1]	18	61	5, 134	84	41, 083	----------	2	----------	48. 68
Total	129	1, 349	292, 755	217	2, 483, 772	----------	132	----------	53. 14

[1] Includes Arizona, Colorado, Montana, Nevada, and Oregon.

TABLE 25.—*Men employed, man-days worked, man-hours worked, and fatal and nonfatal injuries, at placer mines, by location, 1955*

	Underground	Surface	Dredging	Hydraulicking	Other methods	Total	Office workers	Grand total
Men employed	13	4	1, 046	28	210	1, 301	48	1, 349
Man-days of employment	1, 708	382	248, 646	2, 466	25, 233	278, 525	14, 230	292, 755
Average days active	138	96	238	88	120	214	296	217
Man-hours of employment	14, 024	3, 156	2, 086, 653	22, 839	241, 244	2, 367, 916	115, 856	2, 483, 772
Fatalities	----------	----------	----------	----------	----------	----------	----------	----------
Nonfatal injuries	----------	----------	126	1	5	132	----------	132
Fatalities per million man-hours	----------	----------	----------	----------	----------	----------	----------	----------
Nonfatal injuries per million man-hours	----------	----------	60. 38	43. 78	20. 73	55. 75	----------	53. 14
Active mines	7	1	27	19	75	129	----------	129

TABLE 26.—*Injuries at placer mines in the United States and Alaska, by location and degree of injury, 1954 and 1955*

	1954						1955					
	Fatal	Permanent total	Permanent partial	Temporary	Total nonfatal	Total fatal and nonfatal	Fatal	Permanent total	Permanent partial	Temporary	Total nonfatal	Total fatal and nonfatal
Underground	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------
Surface	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------
Dredging	1	--------	--------	80	80	81	--------	--------	1	125	126	126
Hydraulicking	--------	--------	--------	3	3	3	--------	--------	1	--------	1	1
Other methods	--------	--------	--------	1	1	1	--------	--------	--------	5	5	5
Total	1	--------	--------	84	84	85	--------	--------	2	130	132	132

TABLE 27.—*Fatal and nonfatal injuries at placer mines, by location and agency, 1954 and 1955*

Location and accident agency	1954		1955	
	Fatal	Nonfatal	Fatal	Nonfatal
Underground:				
Fall of rock or ore from roof or wall				
Handling rock or ore				
Handtools				
Explosives				
Haulage				
Falling down chute, winze, raise, or stope				
Other falls of persons				
Run of ore from raise, chute, or pocket				
Drilling				
Electricity				
Machinery (other than locomotives or drills)				
Mine fires				
Suffocation from natural gases				
Inrush of water				
Stepping on nail				
Handling materials (other than rock or ore) and equipment				
Other causes				
Total underground				
Shaft:				
Falling down shaft				
Objects falling down shaft				
Breaking of cables				
Overwinding				
Cage, skip, or bucket				
Other causes				
Total shaft				
Surface:				
Mine cars, mine locomotives, or aerial trams				
Railway cars or locomotives				
Run or fall of ore in or from ore lines				
Falls of persons				15
Stepping on nail				
Handtools				20
Electricity				
Machinery				7
Handling materials and equipment				39
Other causes				50
Total surface				131
Dredging:				
Machinery		11		
Electricity				
Boiler explosions or bursting steam pipes				
Falls of persons		11		
Handtools		9		
Handling materials and equipment	1	15		
Other causes		34		
Total dredging	1	80		
Hydraulicking:				
Cave of bank				
Explosives				1
Hydraulic giants		3		
Falls of persons				
Rock while handling				
Handtools				
Machinery, derricks, etc				
Handling materials (other than rock or ore) and equipment				
Other causes				
Total hydraulicking		3		1
Other methods		1		
Grand total	1	84		132

MINING METHODS

Mining methods are classified in this statistical circular by location, as follows:

Underground mine:
- Open stoping.
- Timbered stoping.
- Filled stoping.
- Shrinkage stoping.
- Caving methods.
- Combined methods.
- Not stated.

Opencut mine:
- Shovels or draglines.
- Scrapers.
- Hand loading.
- Other methods.
- Not stated.

In table 28, salient statistics are combined on injuries, injury rates, and employment data over a 5-year period (1951–55).

TABLE 28.—*Employment data and injury experience in the metal and nonmetal industries of the United States and Alaska, by location, size group, and mining method, 1951–55*

Size group and mining method	Underground									
	Active mines					Men employed				
	1951	1952	1953	1954	1955	1951	1952	1953	1954	1955
25 or more men:										
Open stoping	84	99	100	117	172	9,207	9,954	10,135	9,921	10,772
Timbered stoping	36	31	27	44	38	4,262	4,227	2,649	3,568	2,711
Filled stoping	13	9	11	12	8	1,851	1,251	1,524	1,686	579
Shrinkage stoping	31	17	21	23	19	1,747	1,493	1,705	1,718	1,570
Caving methods	30	30	30	32	30	6,378	6,520	7,212	6,466	6,902
Combined methods	65	70	58	44	56	6,653	8,120	6,902	5,153	8,192
Not stated	631	637	376	378	31	7,851	7,827	6,966	6,893	5,157
Total	890	893	623	650	354	37,949	39,392	37,093	35,405	35,883
15 to 24 men: [1]										
Open stoping	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Timbered stoping	-------	-------	-------	-------	11	-------	-------	-------	-------	202
Filled stoping	-------	-------	-------	-------	3	-------	-------	-------	-------	51
Shrinkage stoping	-------	-------	-------	-------	3	-------	-------	-------	-------	56
Caving methods	-------	-------	-------	-------	3	-------	-------	-------	-------	48
Combined methods	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Not stated	-------	-------	-------	-------	7	-------	-------	-------	-------	122
Total	-------	-------	-------	-------	27	-------	-------	-------	-------	479
1 to 14 men: [1]										
Open stoping	-------	-------	-------	-------	227	-------	-------	-------	-------	1,275
Timbered stoping	-------	-------	-------	-------	137	-------	-------	-------	-------	578
Filled stoping	-------	-------	-------	-------	19	-------	-------	-------	-------	79
Shrinkage stoping	-------	-------	-------	-------	37	-------	-------	-------	-------	217
Caving methods	-------	-------	-------	-------	16	-------	-------	-------	-------	51
Combined methods	-------	-------	-------	-------	255	-------	-------	-------	-------	1,093
Not stated	-------	-------	-------	-------	225	-------	-------	-------	-------	626
Total	-------	-------	-------	-------	916	-------	-------	-------	-------	3,919

Size group and mining method	Average days active					Man-days worked				
	1951	1952	1953	1954	1955	1951	1952	1953	1954	1955
25 or more men:										
Open stoping	277	260	271	256	260	2,550,899	2,590,028	2,743,692	2,543,709	2,804,262
Timbered stoping	248	238	257	212	245	1,055,459	1,005,221	681,760	757,125	664,070
Filled stoping	302	290	294	284	234	558,954	363,088	448,757	478,855	135,566
Shrinkage stoping	289	257	281	259	271	504,202	383,771	478,547	445,324	424,877
Caving methods	287	259	271	228	265	1,829,891	1,691,161	1,953,464	1,471,949	1,830,374
Combined methods	301	298	275	289	277	2,003,184	2,421,271	1,899,075	1,490,146	2,266,847
Not stated	272	279	283	256	302	2,139,029	2,184,735	1,968,572	1,765,247	1,555,130
Total	280	270	274	253	270	10,641,618	10,639,275	10,173,867	8,952,355	9,681,126
15 to 24 men: [1]										
Open stoping	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Timbered stoping	-------	-------	-------	-------	269	-------	-------	-------	-------	54,348
Filled stoping	-------	-------	-------	-------	259	-------	-------	-------	-------	13,189
Shrinkage stoping	-------	-------	-------	-------	284	-------	-------	-------	-------	15,898
Caving methods	-------	-------	-------	-------	285	-------	-------	-------	-------	13,702
Combined methods	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Not stated	-------	-------	-------	-------	248	-------	-------	-------	-------	30,240
Total	-------	-------	-------	-------	266	-------	-------	-------	-------	127,377
1 to 14 men: [1]										
Open stoping	-------	-------	-------	-------	228	-------	-------	-------	-------	291,026
Timbered stoping	-------	-------	-------	-------	205	-------	-------	-------	-------	118,452
Filled stoping	-------	-------	-------	-------	208	-------	-------	-------	-------	16,433
Shrinkage stoping	-------	-------	-------	-------	212	-------	-------	-------	-------	46,062
Caving methods	-------	-------	-------	-------	234	-------	-------	-------	-------	11,948
Combined methods	-------	-------	-------	-------	219	-------	-------	-------	-------	238,994
Not stated	-------	-------	-------	-------	157	-------	-------	-------	-------	98,466
Total	-------	-------	-------	-------	210	-------	-------	-------	-------	821,381

See footnotes at end of table, p. 47.

TABLE 28.—*Employment data and injury experience in the metal and nonmetal industries of the United States and Alaska, by location, size group, and mining method, 1951–55*—Continued

Size group and mining method	Underground—Continued														
	Man-hours worked					Injuries									
	1951	1952	1953	1954	1955	Fatal					Nonfatal				
						1951	1952	1953	1954	1955	1951	1952	1953	1954	1955
25 or more men:															
Open stoping	20,406,495	20,691,854	22,011,917	20,353,611	22,488,921	24	22	24	9	12	929	984	1,085	1,070	1,266
Timbered stoping	8,459,565	8,067,201	5,451,673	6,066,113	5,315,387	5	6	5	2	5	415	375	245	349	440
Filled stoping	4,471,645	2,904,704	3,590,865	3,824,997	1,086,574	------	2	4	3	1	368	142	223	215	48
Shrinkage stoping	4,013,705	3,355,842	3,827,316	3,562,588	3,405,543	3	8	11	3	2	618	420	468	340	331
Caving methods	14,647,267	13,552,357	15,627,441	11,775,626	14,643,033	9	13	8	3	11	576	696	751	531	703
Combined methods	15,814,785	19,394,748	15,239,242	11,942,252	18,156,725	15	20	12	18	13	1,667	1,926	1,648	1,056	1,284
Not stated	17,145,786	17,479,428	15,749,804	14,126,382	12,032,022	18	23	13	20	17	952	908	675	619	668
Total	84,959,248	85,446,134	81,498,258	71,651,569	77,128,205	74	94	77	58	61	5,525	5,451	5,095,	4,180	4,740
15 to 24 men:[1]															
Open stoping	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Timbered stoping	------	------	------	------	434,783	------	------	------	------	------	------	------	------	------	30
Filled stoping	------	------	------	------	105,512	------	------	------	------	------	------	------	------	------	2
Shrinkage stoping	------	------	------	------	127,184	------	------	------	------	------	------	------	------	------	33
Caving methods	------	------	------	------	109,616	------	------	------	------	------	------	------	------	------	8
Combined methods	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Not stated	------	------	------	------	241,929	------	------	------	------	------	------	------	------	------	19
Total	------	------	------	------	1,019,024	------	------	------	------	------	------	------	------	------	92
1 to 14 men:[1]															
Open stoping	------	------	------	------	2,333,329	------	------	------	------	3	------	------	------	------	162
Timbered stoping	------	------	------	------	945,067	------	------	------	------	1	------	------	------	------	66
Filled stoping	------	------	------	------	130,653	------	------	------	------	------	------	------	------	------	19
Shrinkage stoping	------	------	------	------	369,784	------	------	------	------	------	------	------	------	------	44
Caving methods	------	------	------	------	97,928	------	------	------	------	------	------	------	------	------	1
Combined methods	------	------	------	------	1,920,228	------	------	------	------	2	------	------	------	------	138
Not stated	------	------	------	------	782,024	------	------	------	------	4	------	------	------	------	49
Total	------	------	------	------	6,579,013	------	------	------	------	10	------	------	------	------	479

Size group and mining method	Injury-frequency rate									
	Fatal					Nonfatal				
	1951	1952	1953	1954	1955	1951	1952	1953	1954	1955
25 or more men:										
Open stoping	1.18	1.06	1.09	0.44	0.53	45.52	47.55	49.29	52.57	56.29
Timbered stoping	.59	.74	.92	.33	.94	49.06	46.48	44.94	57.53	82.78
Filled stoping	------	.69	1.11	.78	.92	82.30	48.89	62.10	56.21	44.18
Shrinkage stoping	.75	2.38	2.87	.84	.59	153.97	125.15	122.28	95.44	97.19
Caving methods	.61	.96	.51	.25	.75	39.32	51.36	48.06	45.09	48.01
Combined methods	.95	1.03	.79	1.51	.72	105.41	99.31	108.14	88.43	70.72
Not stated	1.05	1.32	.83	1.42	1.41	55.52	51.95	42.86	43.82	55.52
Total	.87	1.10	.94	.81	.79	65.03	63.79	62.52	58.34	61.46
15 to 24 men:[1]										
Open stoping	------	------	------	------	------	------	------	------	------	------
Timbered stoping	------	------	------	------	------	------	------	------	------	69.00
Filled stoping	------	------	------	------	------	------	------	------	------	18.96
Shrinkage stoping	------	------	------	------	------	------	------	------	------	259.47
Caving methods	------	------	------	------	------	------	------	------	------	72.98
Combined methods	------	------	------	------	------	------	------	------	------	------
Not stated	------	------	------	------	------	------	------	------	------	78.54
Total	------	------	------	------	------	------	------	------	------	90.28
1 to 14 men:[1]										
Open stoping	------	------	------	------	1.29	------	------	------	------	69.43
Timbered stoping	------	------	------	------	1.06	------	------	------	------	69.84
Filled stoping	------	------	------	------	------	------	------	------	------	145.42
Shrinkage stoping	------	------	------	------	------	------	------	------	------	118.99
Caving methods	------	------	------	------	------	------	------	------	------	10.21
Combined methods	------	------	------	------	1.04	------	------	------	------	71.87
Not stated	------	------	------	------	5.11	------	------	------	------	62.66
Total	------	------	------	------	1.52	------	------	------	------	72.81

See footnotes at end of table, p. 47.

TABLE 28.—*Employment data and injury experience in the metal and nonmetal industries of the United States and Alaska, by location, size group, and mining method, 1951–55*—Continued

Opencut

Size group and mining method	Active mines					Men employed				
	1951	1952	1953	1954	1955	1951	1952	1953	1954	1955
25 or more men:										
Shovels or draglines	218	232	238	194	168	19,669	20,775	21,294	19,689	18,856
Scrapers	1	1	1	(2)	3	29	30	37	(2)	86
Hand loading	2	2	(2)	(2)	(2)	70	64	(2)	(2)	(2)
Other methods	14	5	5	8	27	377	200	190	331	903
Not stated	121	182	258	309	3	1,088	862	980	996	201
Total	356	422	502	511	201	21,233	21,931	22,501	21,016	20,046
15 to 24 men: [1]										
Shovels or draglines	----	----	----	----	40	----	----	----	----	731
Scrapers	----	----	----	----	4	----	----	----	----	83
Hand loading	----	----	----	----	----	----	----	----	----	----
Other methods	----	----	----	----	----	----	----	----	----	----
Not stated	----	----	----	----	5	----	----	----	----	82
Total	----	----	----	----	49	----	----	----	----	896
1 to 14 men: [1]										
Shovels or draglines	----	----	----	----	371	----	----	----	----	1,638
Scrapers	----	----	----	----	102	----	----	----	----	285
Hand loading	----	----	----	----	99	----	----	----	----	298
Other methods	----	----	----	----	164	----	----	----	----	803
Not stated	----	----	----	----	233	----	----	----	----	697
Total	----	----	----	----	969	----	----	----	----	3,721

Size group and mining method	Average days active					Man-days worked				
	1951	1952	1953	1954	1955	1951	1952	1953	1954	1955
25 or more men:										
Shovels or draglines	299	284	297	255	273	5,875,824	5,900,516	6,321,063	5,017,409	5,135,276
Scrapers	281	300	260	----	277	8,149	9,000	9,620	(2)	23,818
Hand loading	222	233	----	----	(2)	15,505	14,917	(2)	(2)	(2)
Other methods	243	332	310	274	280	91,609	66,390	58,855	90,734	252,824
Not stated	251	143	216	183	244	273,628	123,143	211,316	181,995	49,081
Total	295	279	293	252	272	6,264,715	6,113,966	6,600,854	5,290,138	5,460,999
15 to 24 men: [1]										
Shovels or draglines	----	----	----	----	216	----	----	----	----	157,817
Scrapers	----	----	----	----	216	----	----	----	----	17,916
Hand loading	----	----	----	----	----	----	----	----	----	----
Other methods	----	----	----	----	----	----	----	----	----	----
Not stated	----	----	----	----	220	----	----	----	----	18,038
Total	----	----	----	----	216	----	----	----	----	193,771
1 to 14 men: [1]										
Shovels or draglines	----	----	----	----	188	----	----	----	----	308,037
Scrapers	----	----	----	----	166	----	----	----	----	47,241
Hand loading	----	----	----	----	136	----	----	----	----	40,594
Other methods	----	----	----	----	200	----	----	----	----	160,529
Not stated	----	----	----	----	170	----	----	----	----	118,177
Total	----	----	----	----	181	----	----	----	----	674,578

See footnotes at end of table, p. 47.

Table 28.—*Employment data and injury experience in the metal and nonmetal industries of the United States and Alaska, by location, size group, and mining method, 1951–55*—Continued

[Opencut—Continued]

Size group and mining method	Man-hours worked					Injuries									
						Fatal					Nonfatal				
	1951	1952	1953	1954	1955	1951	1952	1953	1954	1955	1951	1952	1953	1954	1955
25 or more men:															
Shovels or draglines	47, 272, 865	47, 433, 487	50, 854, 458	40, 354, 199	41, 224, 133	15	14	14	16	8	692	633	681	441	486
Scrapers	65, 192	72, 000	76, 960	(2)	190, 544	------	------	------	(2)	------	7	2	2	(2)	------
Hand loading	124, 042	119, 334	(2)	(2)	(2)	------	------	(2)	(2)	(2)	1	3	(2)	(2)	(2)
Other methods	735. 309	531, 119	470, 151	725, 881	2, 023, 599	------	------	------	1	1	10	41	21	29	75
Not stated	2, 226, 204	983, 064	1, 773, 914	1, 500, 724	433, 670	1	------	------	1	------	83	25	48	34	16
Total	50, 423, 612	49, 139, 004	53, 175, 483	42, 580, 804	43, 871, 946	16	14	14	18	9	793	704	752	504	577
15 to 24 men:[1]															
Shovels or draglines	------	------	------	------	1, 294, 758	------	------	------	------	2	------	------	------	------	90
Scrapers	------	------	------	------	143, 321	------	------	------	------	------	------	------	------	------	2
Hand loading	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Other methods	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Not stated	------	------	------	------	151, 313	------	------	------	------	------	------	------	------	------	3
Total	------	------	------	------	1, 589, 392	------	------	------	------	2	------	------	------	------	95
1 to 14 men:[1]															
Shovels or draglines	------	------	------	------	2, 521, 644	------	------	------	------	4	------	------	------	------	96
Scrapers	------	------	------	------	398, 742	------	------	------	------	------	------	------	------	------	25
Hand loading	------	------	------	------	321, 360	------	------	------	------	------	------	------	------	------	20
Other methods	------	------	------	------	1, 312, 278	------	------	------	------	2	------	------	------	------	48
Not stated	------	------	------	------	963, 063	------	------	------	------	1	------	------	------	------	48
Total	------	------	------	------	5, 517, 087	------	------	------	------	7	------	------	------	------	237

Size group and mining method	Injury frequency rates									
	Fatal					Nonfatal				
	1951	1952	1953	1954	1955	1951	1952	1953	1954	1955
25 or more men:										
Shovels or draglines	0. 32	0. 30	0. 28	0. 40	(2)	14. 64	13. 35	13. 39	10. 93	(2)
Scrapers	------	------	------	------	(2)	107. 38	27. 78	25. 99	------	(2)
Hand loading	------	------	------	------	(2)	8. 06	25. 14	------	------	(2)
Other methods	------	------	------	1. 38	(2)	13. 60	77. 20	44. 67	39. 95	(2)
Not stated	. 45	------	------	. 67	(2)	37. 28	25. 43	27. 06	22. 66	(2)
Total	. 32	. 28	. 26	. 42	(2)	15. 73	14. 33	14. 14	11. 84	(2)
15 to 24 men:[1]										
Shovels or draglines	------	------	------	------	1. 54	------	------	------	------	69. 51
Scrapers	------	------	------	------	------	------	------	------	------	13. 95
Hand loading	------	------	------	------	------	------	------	------	------	------
Other methods	------	------	------	------	------	------	------	------	------	------
Not stated	------	------	------	------	------	------	------	------	------	19. 83
Total	------	------	------	------	1. 26	------	------	------	------	59. 77
1 to 14 men:[1]										
Shovels or draglines	------	------	------	------	1. 59	------	------	------	------	38. 07
Scrapers	------	------	------	------	------	------	------	------	------	62. 70
Hand loading	------	------	------	------	------	------	------	------	------	62. 24
Other methods	------	------	------	------	1. 52	------	------	------	------	36. 58
Not stated	------	------	------	------	1. 04	------	------	------	------	49. 84
Total	------	------	------	------	1. 27	------	------	------	------	42. 96

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[1] This size group not used before 1955.
[2] None reported for 1953, 1954, or 1955.

HISTORY OF INJURY EXPERIENCE IN THE METAL AND NONMETAL INDUSTRIES

(Table 29)

Statistical data on the injury experience at metallic and nonmetallic mines first became available to the Bureau of Mines in 1911.

Coverage of the industry has grown considerably since 1931, when injury and employment data were first supplied to the Bureau on a voluntary basis. The injury-frequency rate per million man-hours of worktime varied considerably from year to year until 1940, after which a decline was noted. Records for 1955 show a 12-percent increase in the combined (fatal and nonfatal) injury rates over 1954. Table 29 shows detailed historical data.

TABLE 29.—*Employment and injury data on metal and nonmetallic mines (except coal mines) in the United States and Alaska, 1911–55* [1]

Year	Men at work	Average days active	Man-days worked	Average length of shift	Man-hours worked	Injuries		Frequency rates per million man-hours	
						Fatal	Nonfatal	Fatal	Nonfatal
1911	165, 979	282	46, 826, 573	--------	--------	695	26, 577	--------	--------
1912	169, 199	287	48, 498, 510	--------	--------	661	30, 724	--------	--------
1913	191, 276	288	55, 077, 855	--------	--------	683	32, 971	--------	--------
1914	158, 115	271	42, 785, 840	--------	--------	559	30, 216	--------	--------
1915	152, 118	280	42, 599, 015	--------	--------	553	35, 295	--------	--------
1916	204, 685	282	57, 736, 425	--------	--------	697	48, 237	--------	--------
1917	200, 579	287	57, 625, 811	--------	--------	852	46, 286	--------	--------
1918	182, 606	297	54, 301, 748	--------	--------	646	42, 915	--------	--------
1919	145, 262	279	40, 461, 350	--------	--------	468	31, 506	--------	--------
1920	136, 583	296	40, 361, 893	--------	--------	425	32, 562	--------	--------
1921	93, 929	238	22, 352, 702	--------	--------	230	18, 604	--------	--------
1922	105, 697	276	29, 141, 293	--------	--------	344	26, 080	--------	--------
1923	123, 279	297	36, 559, 805	--------	--------	367	33, 563	--------	--------
1924	123, 128	290	35, 734, 008	--------	--------	418	33, 118	--------	--------
1925	126, 713	293	37, 172, 359	--------	--------	371	35, 132	--------	--------
1926	127, 823	291	37, 160, 978	--------	--------	430	30, 350	--------	--------
1927	119, 699	284	34, 033, 963	--------	--------	352	25, 133	--------	--------
1928	113, 866	288	32, 803, 610	--------	--------	273	22, 483	--------	--------
1929	118, 735	292	34, 618, 120	--------	--------	350	23, 092	--------	--------
1930	103, 233	270	27, 869, 982	--------	--------	271	15, 594	--------	--------
1931	80, 940	231	18, 721, 486	8. 34	156, 177, 859	158	8, 709	1. 01	55. 76
1932	53, 288	208	11, 095, 167	8. 30	92, 038, 326	107	5, 014	1. 16	54. 48
1933	57, 016	204	11, 642, 113	8. 09	94, 139, 386	95	5, 925	1. 01	62. 94
1934	66, 645	221	14, 723, 215	7. 89	116, 146, 400	116	7, 892	1. 00	67. 95
1935	92, 314	220	20, 352, 372	7. 93	161, 302, 671	164	10, 206	1. 02	63. 27
1936	100, 932	250	25, 209, 905	8. 03	202, 358, 725	199	14, 650	. 98	72. 40
1937	118, 429	252	29, 856, 610	8. 02	239, 544, 432	219	18, 055	. 91	75. 37
1938	103, 027	228	23, 505, 864	8. 01	188, 170, 166	156	12, 722	. 83	67. 61
1939	111, 909	233	26, 032, 368	7. 95	206, 835, 123	173	13, 710	. 84	66. 28
1940	120, 120	242	29, 046, 466	7. 94	230, 727, 699	223	14, 766	. 97	64. 00
1941	125, 290	255	31, 953, 717	7. 94	253, 677, 669	230	15, 772	. 91	62. 17
1942	112, 446	280	31, 441, 708	7. 98	251, 186, 841	237	13, 957	. 94	55. 56
1943	100, 593	290	29, 216, 048	8. 02	234, 240, 893	220	13, 004	. 94	55. 52
1944	81, 674	288	23, 521, 772	8. 03	188, 786, 844	147	10, 177	. 78	53. 91
1945	71, 665	289	20, 688, 791	8. 02	165, 908, 259	112	8, 067	. 68	48. 62
1946	76, 546	255	19, 534, 629	8. 05	157, 282, 937	116	8, 714	. 74	55. 40
1947	83, 404	277	23, 121, 886	8. 04	185, 833, 522	138	9, 601	. 74	51. 66
1948	83, 386	283	23, 556, 636	8. 04	189, 300, 254	119	8, 807	. 63	46. 52
1949	83, 741	256	21, 407, 270	8. 00	171, 316, 256	79	8, 065	. 46	47. 08
1950	80, 269	275	22, 034, 189	8. 00	176, 220, 617	103	7, 849	. 58	44. 54
1951	84, 103	281	23, 642, 139	8. 02	189, 547, 732	112	8, 175	. 59	43. 13
1952	87, 073	268	23, 358, 546	8. 03	187, 602, 968	131	7, 855	. 70	41. 87
1953	85, 294	273	23, 286, 550	8. 03	187, 093, 067	114	7, 583	. 61	40. 53
1954	79, 420	251	19, 931, 447	8. 03	160, 052, 471	95	5, 950	. 59	37. 18
1955	79, 647	263	20, 948, 787	8. 02	168, 042, 855	98	6, 993	. 58	41. 61

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[1] Man-hours not available before 1931.

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